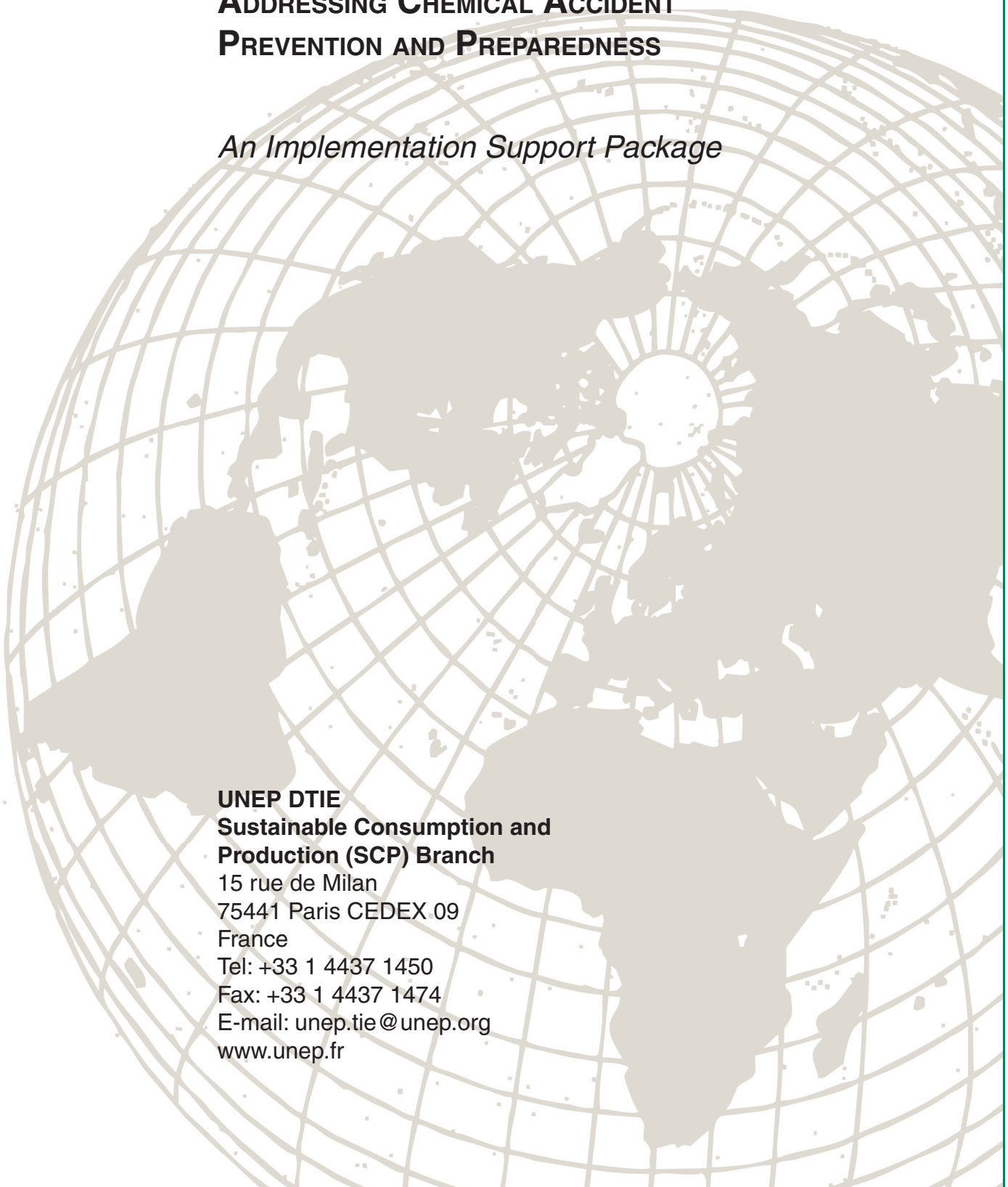
A Flexible Framework for Addressing Chemical Accident Prevention and Preparedness

An Implementation Support Package



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This document was developed by a group of international experts, under the auspices of the United Nations Environment Programme Division of Technology, Industry and Economics (UNEP DTIE), as part of its work pursuant to the Strategic Approach to International Chemicals Management (SAICM) adopted in February 2006.

The aim of SAICM is to "achieve by 2020, the use and production of chemicals in ways that lead to the minimisation of significant adverse effects on human health and the environment." One of the identified work areas of SAICM is "formulation of prevention and response measures to mitigate the environmental and health impacts of emergencies involving chemicals." For further information on SAICM, see: www.saicm.org.

UNEP DTIE encourages decision-makers in government, local authorities, and industry to develop and implement policies, strategies, and practices that are cleaner and safer, make efficient use of natural resources, ensure environmentally sound management of chemicals, reduce pollution and risks for humans and the environment, enable implementation of conventions and international agreements, and incorporate environmental costs.

The UNEP DTIE strategy is to influence informed decision-making through partnerships with other international organisations, governmental authorities, business and industry, and nongovernmental organisations; support implementation of conventions; and build capacity in developing countries.

This publication was developed in the IOMC context. The contents do not necessarily reflect the views or stated policies of individual IOMC Participating Organizations.

The Inter-Organization Programme for the Sound Management of Chemicals (IOMC) was established in 1995 following recommendations made by the 1992 UN Conference on Environment and Development to strengthen cooperation and increase international coordination in the field of chemical safety. The Participating Organizations are FAO, ILO, UNDP, UNEP, UNIDO, UNITAR, WHO, World Bank, and OECD. The purpose of the IOMC is to promote coordination of the policies and activities pursued by the Participating Organizations, jointly or separately, to achieve the sound management of chemicals in relation to human health and the environment.

FOREWORD

Industry is an important driving force for economic growth, providing valuable economic and social benefits to countries, and playing an important role in achieving sustainable development goals. However, many industrial operations involve hazardous chemicals with a potential for accidents – spills, fires, explosions – that can cause serious harm to people, the environment, and local or even national economies.

In 2007, we launched UNEP's *Flexible Framework Initiative for Addressing Chemical Accident Prevention and Preparedness* in order to improve the capacity of national governments, technical institutions, and experts on how to address the risks of chemical accidents, and help them develop and implement an appropriate chemical accident prevention and preparedness programme.

As part of this Initiative, we first published the *Flexible Framework Guidance Document*, which assists governments in developing, reviewing, or revising their chemical accident prevention and preparedness programmes. Since its publication, we received several requests from countries for UNEP support in applying the *Guidance*. As a result, we have implemented several country projects to help national authorities and other stakeholders to implement the *Guidance* and provided training to improve the capacity of relevant institutions, agencies, and experts to address this important issue.

This *Implementation Support Package* was developed by UNEP to supplement the previously published *Guidance Document* and provide further support for country implementation projects. As in the development of the previous guidance, UNEP worked with partners. We were able to rely on the active engagement of the members of the UNEP's Flexible Framework Expert Working Group who provided us with their support and expert inputs. Among these a special note of acknowledgement to the European Commission's Joint Research Centre – Major Accident Hazards Bureau and to the US Environmental Protection Agency, as well as to the individual experts who committed their valuable time and effort to make this publication possible.

By capturing experience from country projects, this *Implementation Support Package* includes guidance and materials for countries wishing to follow the process described in the *Guidance* as well as for external organisations and experts helping countries by providing training or other technical support.

The *Implementation Support Package* also invites others – including international organisations, countries with experience in implementing chemical accident prevention and preparedness programmes, individual enterprises, industry and professional associations, research institutes, non-profit organisations, and individual experts – to support countries' efforts to improve their national programmes on chemical accident prevention and preparedness.

By making this publication available, we hope to increase the number of countries interested in developing and strengthening national programmes on chemical accident prevention and preparedness.

Sylvie Lemmet, Director

Division of Technology, Industry and Economics

United Nations Environment Programme

ACKNOWLEDGEMENTS

This Implementation Support Package ("ISP") is part of the Flexible Framework Initiative for Addressing Chemical Accident Prevention and Preparedness launched by the United Nations Environment Programme (UNEP) in 2007 to improve chemical safety, particularly in fast-growing economies that are experiencing rapid industrialisation and need support to address increased risks of chemical accidents. The Flexible Framework for Addressing Chemical Accident Prevention and Preparedness *("Flexible Framework Guidance")* was the first publication of this Initiative. The *Flexible Framework Guidance* reflects more than 30 years of experience in addressing chemical accident prevention and preparedness and builds on international agreements and guidance materials in this area as well as on key national and regional laws and regulations.

To develop the *Guidance*, UNEP established an Expert Working Group with selected experts in chemical safety and industrial accident prevention and preparedness. The Group is comprised of representatives of relevant UN agencies, including the International Labour Organization (ILO), the United Nations Economic Commission for Europe (UNECE), the United Nations Industrial Development Organization (UNIDO), the United Nations Institute for Training and Research (UNITAR), the World Health Organization (WHO), and the UNEP/Office for the Coordination of Humanitarian Affairs (OCHA) Joint Environment Unit, known as the Joint UNEP/OCHA Environment Unit (JEU). There are additional representatives from other inter-governmental organisations, *i.e.*, the European Commission (EC), the Major Accident Hazards Bureau of the European Commission's Joint Research Centre (EC-JRC-MAHB) and the Organisation for Economic Cooperation and Development (OECD), as well as non-governmental organisations such as the Asian Disaster Preparedness Center (ADPC). Other members include the International Council of Chemical Associations (ICCA) and the Ibero-American Programme for Science, Technology and Development (CYTED). Selected government officials from the Netherlands, Sweden (the Swedish Civil Contingencies Agency (MSB)), Thailand, and the United States (US Environmental Protection Agency (EPA)), as well as independent experts, are represented in the Expert Working Group.

Since the publication of the *Guidance* in 2010, the Expert Working Group has continued to support UNEP in the activities that form a part of the Flexible Framework Initiative. A number of the members of the Group have provided technical support to UNEP's in-country Project implementation activities (the "Chemical Accident Prevention and Preparedness (CAPP) Programme Projects").

The Group concluded that capturing the practical experience gained through the implementation of the CAPP Programme Projects in Cambodia, the Philippines, Mali, and Senegal would be valuable for future in-country activities and, as a result, in 2010 UNEP established a Training Sub-group of the Expert Working Group charged with the task of developing this Implementation Support Package, consisting of the following members:

- Mr. Fritz Balkau (Independent Consultant)
- Mr. Luciano Fabbri (EC-JRC-MAHB)
- Mr. Mark Hailwood (Independent Expert)
- Ms. Kim Jennings (US EPA)
- Ms. Kathy Jones (US EPA)
- Mr. Sisira Kumara (ADPC)
- Mr. Hector Ruiz Lim (ADPC)
- Mr. Tomas Marques (UNEP)
- Mr. Desta Mebratu (UNEP)
- Ms. Katsiaryna Paulavets (UNEP)
- Mr. Franck Prats (INERIS)
- Mr. Loy Rego (ADPC)
- Ms. Fran Schulberg (Independent Consultant)
- Ms. Johanna Suikkanen (UNEP)
- Ms. Maureen Wood (EC-JRC-MAHB)
- Ms. Ruth Zugman Do Coutto (UNEP)

This ISP is published under the framework of the Inter-Organisation Programme for the Sound Management of Chemicals (IOMC). The Participating Organisations of the IOMC include the Food and Agriculture Organization (FAO), United Nations Development Programme (UNDP), ILO, UNEP, UNIDO, UNITAR, WHO, OECD, and the World Bank.

Furthermore, this Implementation Support Package underwent a peer review process during which it was circulated to 100 experts representing 70 organisations. In addition to organisations that form the Expert Working Group, the Peer Review Group included:

- international organisations (the Global Environmental Facility (GEF), the Pan-American Health Organization (PAHO), European Commission – DG Environment);
- government representatives of selected (implementing or donor) countries (Brazil, Cambodia, Chile, Finland, France, Ghana, Mali, Mexico, the Netherlands, the Philippines, Tanzania, Thailand, Senegal, Sri Lanka, Sweden, and Switzerland);

- other public institutions (the US Chemical Safety and Hazard Investigation Board (CSB), the French Bureau for Analysis of Industrial Risks and Pollution (BARPI), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ));
- regional organisations (Association of Southeast Asian Nations, Basel Convention Regional Center for Central America and Mexico);
- professional organisations (Center for Chemical Process Safety – USA, European Process Safety Centre, Institute of Chemical Engineers (IChemE), National Safety Council of India);
- chemical industry associations (Brazil – ABIQUIM, the Philippines – SPIK, South Africa – CAIA, the United States – ACC, Canadian Chlorine Chemistry Council);
- academia and research institutions (Netherlands Organisation for Applied Scientific Research – TNO, Université de Senghor – Egypt, Moratuwa University – Sri Lanka, Tsinghua University – China, Renmin University – China, Mahidol University – Thailand, Ecole des Mines de Nancy – France);
- civil society (Green Cross International);
- private sector consultancies (Quartz Afrique, BiPRO, Cowley Associates, Safetec);
- National Cleaner Production Centres (Colombia, Egypt, Mexico, Serbia, Sri Lanka); and
- independent experts.

The comments offered as part of the peer review process were valuable in shaping the final ISP, including those by Professor Jinsong Zhao of Tsinghua University, Ms. Carina Fredström of the Swedish Civil Contingencies Agency, Dr. Reinhard Joas of BiPRO GmbH, Mr. Hector Lim of ADPC, Mr. Alberto Camacho of GIZ, Dr. Ana Boischio of PAHO, Mr. Barry S. Dyer of ICCA/Responsible Care New Zealand Inc., Ms. Marie-Chantal Huet of the OECD, Dr. Villas Bôas of CYTED, Mr. Charles Cowley of Cowley Associates Ltd., Mr. V.B. Sant of the National Safety Council of India, Ms. Josephine Kalima and Mr. Daniel Matata of the Government Central Laboratory Agency (GCLA) of Tanzania, Mrs. Fagamou Sy Diop of the Ministry of Environment and Nature Protection of Senegal, and Ms. Maud Casier of the Ministry of Ecology, Sustainable Development, Transportation and Housing (MEDDTL) of France.

From UNEP, Ms. Ruth Zugman Do Coutto and Mr. Tomas Marques were responsible for managing this Project with the support of Ms. Johanna Suikkanen and Ms. Katsiaryna Paulavets. The main writer and editor of this ISP was Ms. Fran Schulberg.

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DESCRIPTION OF TERMS USED

To assist the reader, the following terms are defined for purposes of this Implementation Support Package:

CAPP: Chemical Accident Prevention and Preparedness.

CAPP Programme: the collection of laws, regulations, policies, guidance, and other instruments, as well as the related institutional arrangements, developed by a country to address the various aspects of chemical accident prevention and preparedness.

CAPP Programme Project (or "Project"): all activities carried out within a country ("Implementing Country") related to the Initial, Assessment, and Development Phases of the establishment of a CAPP Programme based on the *Flexible Framework Guidance* and this Implementation Support Package. This includes Task Force meetings and consultations, Workshops, Training Sessions, and development of a Country Situation Report and a Roadmap.

Country Situation Report: a document prepared by the Implementing Country providing an overview of the nature and extent of hazardous installations in the Country, a historical record of chemical accidents, and the legal and administrative context related to chemical accident prevention and preparedness (see Chapter 2(b) and Annex I).

Flexible Framework Guidance: published by UNEP in 2010, the *Flexible Framework Guidance* offers insights for governments wanting to develop, improve, or review their chemical accident prevention and preparedness (CAPP) Programme. More specifically, the *Guidance* describes the steps that are needed before developing and implementing laws, regulations, policies, guidance, or other instruments for an effective CAPP Progamme; sets out the possible elements of such instruments; and provides resource materials related to how these elements may be implemented. The full title of the document is "*A Flexible Framework for Addressing Chemical Accident Prevention and Preparedness: A Guidance Document*."

Flexible Framework Initiative: UNEP's overarching activities related to promoting chemical accident prevention and preparedness at the national level, including development of guidance materials and implementation of country-level CAPP Programme Projects.

Focal Point(s): representative(s) of the Implementing Country who are the liaison between officials and interested parties in their Country and the Technical Support Partner. Focal Points generally act as the local Project manager for the CAPP Programme Project; if not, they should ensure that another person is assigned responsibility for this role. Guidance for Focal Points is included in Chapter 3(b).

Implementation Support Package (ISP): this publication, developed as a supplement to the *Flexible Framework Guidance*. The ISP contains a collection of generic information and guidance to support any country – called an "Implementing Country" – that wishes to have technical and/or financial assistance in its efforts to address chemical accident prevention and preparedness following the approach outlined in the *Flexible Framework Guidance*.

Implementing Country: a country taking action to develop or improve its chemical accident prevention and preparedness programme, using the *Flexible Framework Guidance* and this Implementation Support Package (receiving support from a Technical Support Partner). Guidance for an Implementing Country is included in Chapter 3.

Instructors: members of the Support Team who are responsible for presenting information, or facilitating discussions/ exercises, during a Workshop or Training Session. Guidance for Instructors is included in Chapter 4(c).

Participants: the audience for the Workshops and/or Training Sessions that are part of the CAPP Programme Project. Guidance for Participants is included in Chapter 3(d).

Roadmap: a document prepared by the Implementing Country, as the culmination of the CAPP Programme Project, which identifies the next steps for further developing and implementing a CAPP Programme. It sets out the Country's objectives related to its CAPP Programme and specifies the path for meeting the objectives (see Chapter 2(c) and Annex II).

Support Team: The collective term to mean the Technical Support Partner, any collaborating organisations, and the Instructors (including trainers and facilitators) working with an Implementing Country during a CAPP Programme Project. Guidance for a Support Team is included in Chapter 4.

Task Force: a national inter-agency body established by the Implementing Country, consisting of representatives from the relevant government bodies (and, as appropriate, from non-governmental stakeholders) that are – or should be – involved with chemical accident prevention and preparedness. The Task Force is responsible for leading the CAPP Programme Project including the preparation of the Country Situation Report and the Roadmap. Guidance for a Task Force is included in Chapter 3(c).

Technical Support Partner (TSP): an organisation that has been invited by the Implementing Country to provide support for its activities related to a CAPP Programme Project. The Technical Support Partner may be UNEP (alone or with a collaborating organisation(s)), or may be a different external organisation. Guidance for Technical Support Partners is included in Chapter 4(b).

EXECUTIVE SUMMARY

Background

UNEP established the Flexible Framework Initiative in 2007 in order to support any country that wishes to review and, as appropriate, improve its programmes or policies related to prevention of, and preparedness for, accidents at hazardous installations. The goals of the Initiative are to: increase countries' understanding of issues related to chemical accident prevention and preparedness (CAPP); help countries identify their chemical accident risks/hazards and understand whether there are sufficient protection measures in place; improve the capacity of relevant institutions, agencies and experts to address the risks of chemical accidents; and help countries develop and implement appropriate CAPP Programmes.

As part of this Initiative, UNEP published in 2010 a guidance document directed at national governments entitled *"A Flexible Framework for Addressing Chemical Accident Prevention and Preparedness: A Guidance Document"* (*"Flexible Framework Guidance"*). This *Guidance* describes a five-phase approach to help a country understand its local risks/hazards and then develop and implement a chemical accident prevention and preparedness (CAPP) Programme designed for its particular situation. The *Flexible Framework Guidance* elaborates possible elements of such a Programme and provides resource materials related to how the elements may be implemented, based on best practices from other countries and international initiatives.

The title *"Flexible Framework"* reflects the fact that the *Guidance* is intended to support any country, including those that are industrialised as well as those that may not have chemical-related industries but nonetheless face risks from common hazardous installations such as pesticide warehouses, liquefied petroleum gas (LPG) distribution facilities, mining operations, hazardous waste sites, explosives depots, and refrigeration facilities. The five-phase approach also recognises that many countries will have limited resources and expertise and, therefore, may choose to address chemical accident prevention and preparedness in stages over time. Consequently, they will need to assess their needs and identify priorities.

UNEP received very positive response to the *Flexible Framework Guidance*, including requests from several countries for additional support in applying the *Guidance*. As a result, UNEP organised two Pilot CAPP Programme Projects to work with authorities and other stakeholders – in Cambodia and the Philippines – to further elaborate mechanisms to implement the *Guidance* and to provide training to improve the capacity of relevant institutions, agencies, and experts within the countries to address the issue of chemical accidents.

Why did UNEP Develop this Implementation Support Package (ISP)?

This ISP was developed to supplement the *Flexible Framework Guidance* in order to provide further support for future CAPP Programme Projects. By capturing the experience from earlier Projects, this ISP includes guidance and materials for both countries wishing to follow the process described in the *Flexible Framework Guidance* (called "Implementing Countries") as well as for external organisations and experts helping Implementing Countries by providing training or other technical support (called collectively a "Support Team").

Based on the lessons learned from the two Pilot Projects, as well as subsequent CAPP Programme Projects, UNEP and its collaborators developed a process for:

- engaging key stakeholders through a representative national Task Force and consultation process;
- capturing relevant information about hazardous installations and related laws and policies in a document called the Country Situation Report;
- training activities to build the capacity of officials and other experts in a country; and
- planning for improvements in chemical accident prevention and preparedness based on a needs assessment, as reflected in a Roadmap for future action.

UNEP (with its collaborators) concluded that the process and related experience should be collected in a format that can be used to facilitate future CAPP Programme Projects. The goal is to avoid the need to duplicate efforts for each Implementing Country, while recognising the need to adapt each Project to local circumstances. Thus, the ISP allows additional CAPP Programme Projects to be undertaken at a lower cost and effort and with

confidence in using a proven approach. In addition to capturing "lessons learned" to date in this ISP, a web-portal has been established to continually expand and improve the collective experience with updated materials, guidance, and case studies.

Another objective in creating this ISP is to attract others – international organisations, enterprises, countries, professional associations, non-profit organisations, etc. – to support countries' efforts to improve chemical accident prevention and preparedness. This can be done in a number of ways, such as providing financial or technical support to UNEP or directly to an Implementing Country. Another option is to take the lead in a Support Team, replacing UNEP as the "Technical Support Partner."

Who is the Intended Audience?

The intended audience for the ISP can be broken into three categories:

- Implementing Countries, with guidance and materials directed to: the Focal Point (lead representative of the Country); the Task Force (an inter-agency representative body responsible for leading the Project); and Participants (all who attend Project-related training activities) (see Chapter 3);
- Support Teams, with guidance and materials directed to: Technical Support Partner (organisation invited by the Implementing Country to provide assistance); and Instructors (experts responsible for presenting information or facilitating discussions/exercises during training activities) (see Chapter 4); and
- Potential Partners and Funders, providing background information on the Flexible Framework Initiative and describing the various ways to support the Initiative with a view to increasing the number of Implementing Countries (see Chapter 5).

What Are the Key Elements of the ISP?

As noted above, the ISP focuses on guidance for both the Implementing Country and for the members of the Support Team. Certain parts of the process are particularly significant and are highlighted in the ISP including:

- the composition and working arrangements for the Task Force, which is a national multi-agency body responsible for leading the CAPP Programme Project;
- the preparation of a well-conceived and timely Country Situation Report, outlining the Country's vulnerability to chemical accidents and providing the background information needed to adapt the training and other activities to local circumstances, leading to a plan of action to improve national laws and policies;
- the planning and organisation of Workshops and Training Sessions, to improve understanding of the technical and policy issues associated with chemical accident prevention and preparedness and to increase the ability of Participants to carry out their responsibilities with respect to the development and implementation of appropriate laws and policies; and
- the creation of a realistic and appropriate Roadmap, based on a proper needs assessment that charts the course for achieving the Implementing Country's objectives. The Roadmap should include allocation of responsibilities and a time-line to promote implementation.

Using the ISP

The ISP is intended to facilitate the activities by Implementing Countries and Support Teams by providing insights and a peer-reviewed set of materials that have proven to be useful, that reflect good practice, and that are appropriate companions to the *Flexible Framework Guidance*.

It is not the intent of this ISP to provide strict rules or procedures to be followed; it is meant to be used to the extent that it will be helpful for a particular CAPP Programme Project. In this regard, it is very important that the guidance in the ISP be reviewed and adapted to meet the needs and objectives of each Implementing Country.

Chapter 1:
INTRODUCTION and BACKGROUND

This Implementation Support Package (ISP) was developed by the United Nations Environment Programme (UNEP) as part of its Flexible Framework (FF) Initiative for Addressing Chemical Accident Prevention and Preparedness.

This ISP is not a stand-alone document; it was developed as a supplement to the *Flexible Framework for Addressing Chemical Accident Prevention and Preparedness: A Guidance Document ("Flexible Framework Guidance")*[1] and needs to be read in conjunction with the Guidance.

The purpose of the ISP is to provide further support for:

- government agencies and other relevant organisations in countries wishing to follow the process described in the *Flexible Framework Guidance* in order to improve their chemical accident prevention and preparedness (called "Implementing Countries"); and
- external organisations and experts helping Implementing Countries by providing training or other technical support (called collectively a "Support Team").

It also provides information for organisations and experts that might wish to support efforts of countries to improve their CAPP Programmes, suggesting the types of support that are needed and what can be done to further the distribution and use of the *Flexible Framework Guidance* and the ISP.

The ISP is based on the experience working with several Implementing Countries, each of which was supported by UNEP together with collaborating organisations and experts. This ISP manual will be supplemented by a web-portal, updated periodically to capture new experience including additional training materials and tools, as well as case studies.

This ISP is set out in five Chapters:

- **Chapter 1:** the Introduction and Background of the Initiative and its components (the *Flexible Framework Guidance*, country-specific CAPP Programme Projects, and this ISP) and explanation of the value of implementing a CAPP Programme;
- **Chapter 2:** an overview of a typical CAPP Programme Project, along with guidance for developing the key reports associated with the Project (*i.e.*, the Country Situation Report and the Roadmap);
- **Chapter 3:** guidance and materials that can be used by any Implementing Country in order to better understand how a CAPP Programme could be developed to meet its needs and to move forward with the initial, assessment, and development phases as described in the *Flexible Framework Guidance*;
- **Chapter 4:** guidance and materials that can be used by any Support Team, (including the Technical Support Partner, other collaborating organisations and individual experts) in their efforts to help an Implementing Country; and
- **Chapter 5:** information for potential partners and funders to promote the Flexible Framework Initiative (including the *Guidance* and the ISP) and to engage additional countries and organisations to provide support – financial, technical, logistical – to Implementing Countries.

[1]The *Flexible Framework for Addressing Chemical Accident Prevention and Preparedness: A Guidance Document* (referred to in this document as the *Flexible Framework Guidance*) (ISBN: 978-92-807-3094-4) was published in 2010. It can be downloaded at: http://www.unep.fr/scp/sp/saferprod/initiatives.htm#ff

a. What is the Flexible Framework (FF) Initiative (including the *Flexible Framework Guidance*)?

The Flexible Framework Initiative

UNEP established the Flexible Framework Initiative in 2007 in order to support any country that wishes to address the issue of chemical accidents and, specifically, wants to develop, improve, or review its programmes or policies related to prevention of, and preparedness for, industrial accidents involving hazardous substances.[2]

The purposes of the Initiative are to:

- increase countries' understanding of issues related to chemical accident prevention and preparedness (CAPP);
- help countries identify the nature and location of their chemical accident hazards and risks;
- help countries understand whether there are sufficient protective measures in place to reduce the likelihood of a chemical spill, fire, or explosion, and to minimise the adverse impacts of any accidents that do occur;
- improve the capacity of relevant institutions, agencies, and experts within countries to address the risks of chemical accidents; and
- help countries develop and implement appropriate CAPP Programmes, designed to meet their needs and capabilities.

The Initiative is part of UNEP's ongoing activities to build capacities for environmentally sound production and use of chemicals. It is intended to complement related UNEP activities,[3] as well as other relevant international activities and instruments such as those of the International Labour Organization (ILO), World Health Organization (WHO), UN Economic Commission for Europe (UNECE), and the Organisation for Economic Cooperation and Development (OECD).[4]

The Flexible Framework Initiative currently consists of two primary components:

- ***the development of guidance materials including the* Flexible Framework Guidance*, the ISP, and the related web-portal (see Chapter 1(b) for an overview of the ISP); and***
- ***"CAPP Programme Projects", consisting of support to individual countries in connection with their efforts to improve chemical accident prevention and preparedness using the* Flexible Framework Guidance *and the ISP (see Chapter 2(a) for an overview of CAPP Programme Projects).***

The Flexible Framework Initiative focuses on prevention of, and preparedness for, chemical accidents at fixed industrial installations. However, this is just part of what is needed for a country to deal with the overall issue of accidents involving hazardous substances. A comprehensive approach would also address:

- response, clean-up, and recovery. Thus, governments should consider what equipment, information, materials, and expertise might be needed to adequately respond to potential accidents in their territory, in light of any assessment of hazards and risks as well as preparedness plans.[5] Furthermore, it is important to recognise that once the immediate impact of any accident has passed, there is a need to plan for clean-

[2]The Initiative was established in light of an action point from the Strategic Approach to International Chemicals Management (SAICM) Global Plan of Action (GPA) calling for the development of collaborative practically-oriented tools for chemical accident prevention (http://www.saicm.org)

[3]These include:
- APELL – **A**wareness and **P**reparedness for **E**mergencies at **L**ocal **L**evel – which was launched in 1986 as a response to industrial accidents that had occurred in both developed and developing countries. The APELL Programme was designed to improve local level emergency preparedness through a community-oriented effort, bringing together industries, local authorities, and community members (http://www.unep.fr/scp/sp/programme);
- Responsible Production Handbook, which was published in 2010, targeted at improving chemical safety within SMEs and along the value chain by engaging businesses, distributors, traders, buyers, and others in the supply chain in safer production, accident prevention, and emergency preparedness (http://www.unep.fr/shared/publications/cdrom/DTIx1212xPA);
- activities of UNEP's Chemicals Branch, which includes a number of activities to protect human health and the environment from adverse effects caused by chemicals throughout their lifecycles (http://www.chem.unep.ch); and
- activities of the Joint UNEP/Office for the Coordination of Humanitarian Affairs (OCHA) Environment Unit, which mobilises and coordinates emergency assistance and response resources for countries facing environmental emergencies and natural disasters with significant environmental impacts (http://www.unocha.org/what-we-do/coordination-tools/environmental-emergencies).

[4]For further information about these activities and instruments, see Annexes V and VI (pages 163-178) of the *Flexible Framework Guidance*.

up and recovery. This plan should take into account possible lingering health and environment impacts as well as the economic consequences of the accident.

- the potential for accidents involving transport of hazardous materials. Countries may decide to include transport of hazardous substances within their CAPP Programme but should be aware that the *Flexible Framework Guidance* does not include information specific to transport risks. While most of the general principles applicable to industrial accidents are relevant to transport accident prevention and preparedness, additional considerations need to be taken into account (such as identifying appropriate transport routes or the choice of transport modes).[6]
- the link between chemical accidents and natural disasters, allowing for efficient use of response expertise and equipment. Furthermore, floods, earthquakes, tsunamis, forest fires, storms, and other natural disasters can trigger chemical accidents (often known as "natechs").

As explained in the *Flexible Framework Guidance*, it is important that key accidents are investigated in order to learn lessons that will reduce the likelihood of similar accidents in the future and improve preparedness planning. Public agencies, enterprises, and others should support the widespread sharing of lessons learned from accidents.

The Flexible Framework Guidance

The *Flexible Framework Guidance* offers insights and practical information to support any country that wishes to undertake a review of its activities related to chemical accident prevention and preparedness.

The* Flexible Framework Guidance*:

- ***describes a process for reviewing and developing a CAPP Programme (see Chapter B, Table IV, and Annex IV of the* Guidance*);***
- ***contains a description of the key elements of a CAPP Programme (see Chapter C of the* Guidance*); and***
- ***provides related resource materials to facilitate development and implementation of a CAPP Programme.***

The *Flexible Framework Guidance* builds on the experience of many countries, in particular the United States and members of the European Union, as well as on international agreements in this field[7] and other international guidance materials.[8]

The *Guidance* was designed to be used globally, including by countries with limited or no programmes or policies in place to address chemical accident prevention and preparedness, as well as by those that have some competencies in this area and want to determine whether improvements can be made.

By applying the approach suggested in the *Flexible Framework Guidance*, a country can focus on those elements of a CAPP Programme that are relevant to its legal and cultural context, taking into account the nature and extent of hazards and risks as well as the country's priorities, resources, and experience.

The process described in the *Guidance* for reviewing relevant national activities and developing a CAPP Programme consists of five phases: Initial; Assessment; Development; Implementation; and Review and Revision. This process is summarised in Figure (a).

[5]One reason for not including response in the *Flexible Framework Guidance* is that, in most countries, the subject of emergency response is addressed in a different regulatory context than prevention and preparedness. Response is often a shared responsibility of local, regional and national bodies (and, possibly, the private sector). Furthermore, other international organisations have programmes addressing emergency response. For example, the Joint UNEP/OCHA Environment Unit (JEU) is a United Nations mechanism created to mobilise and coordinate emergency assistance upon request by countries affected by environmental emergencies and natural disasters with significant environmental impact.

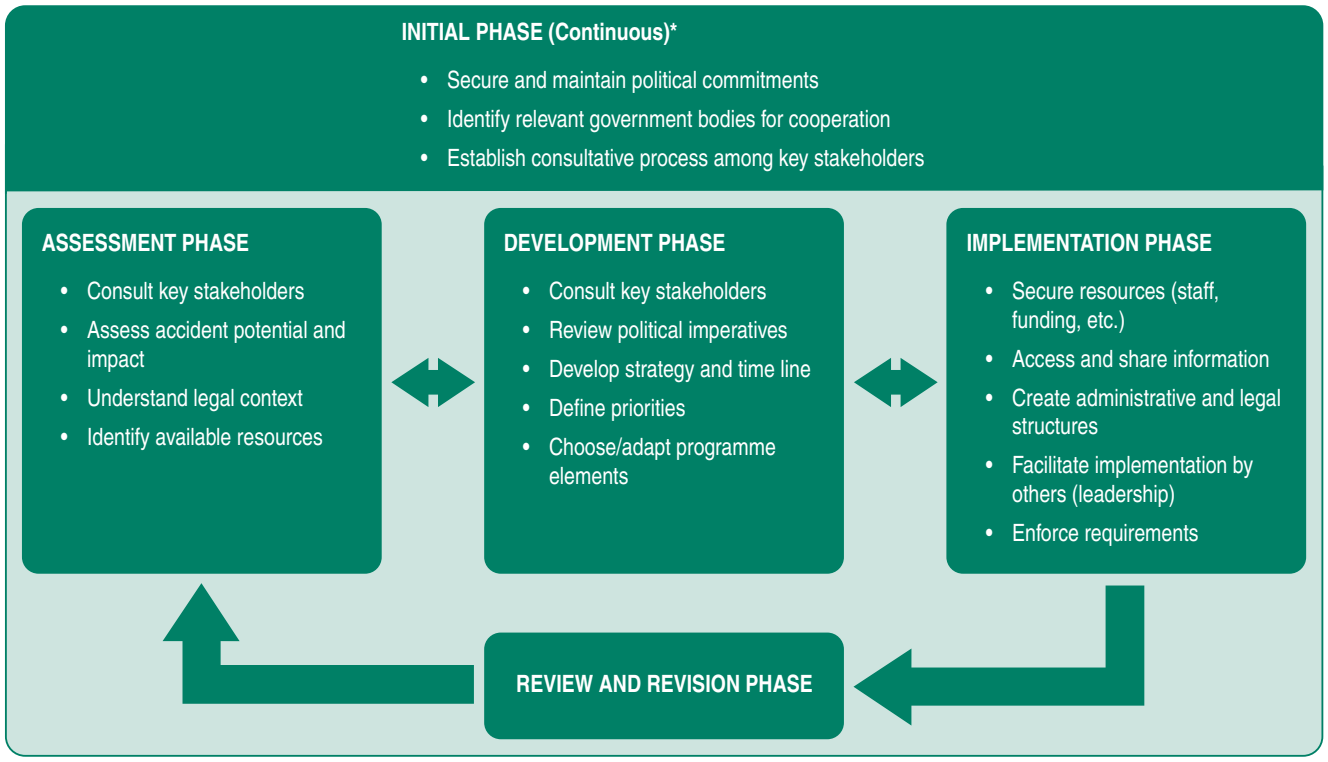
[6]In addition, given the changing nature, variety and quantities of hazardous substances on any transport route, it is more difficult to undertake hazard identification and risk assessment, or to do emergency planning. In fact, emergency services in a community without a fixed hazardous installation are unlikely to be equipped or trained to tackle emergencies involving unfamiliar chemicals. In addition, it is very difficult to identify the population at risk in the event of an accident and, therefore, it is more complicated to provide information to the public and those affected are less likely to know how to act in the event of an accident involving hazardous substances.

[7]In particular, the conventions from the ILO (http://www.ilo.org/ilolex/english/convdisp1.htm) and the UNECE (http://www.unece.org/env/teia/welcome.html).

[8]These include materials developed by:
- UNEP (see footnote 3);
- ILO (www.ilo.org/public/english/protection/safework/index.htm);
- WHO (www.who.int/environmental_health_emergencies/en/index.html); and
- OECD (www.oecd.org/ehs).

See also Annex IV of the *Flexible Framework Guidance* for a further elaboration of the activities in each of the Phases illustrated in Figure (a).

Figure (a)[9]: Phases in the Development and Implementation of a CAPP Programme



*These activities should be continued and sustained throughout the other phases of the Project as well.

CAPP Programme Projects

Starting in 2009, UNEP has been working with individual countries to help them improve chemical accident prevention and preparedness.

These CAPP Programme Projects were started in response to an identified need. UNEP helped to organise the Projects and served as a Technical Support Partner (TSP). Two Pilot Projects were started in 2009 in Cambodia and the Philippines. Building on this experience, UNEP has expanded its efforts in response to requests from other countries in Asia and in Africa, to the extent that funding and other resources were available, with Projects in Mali, Senegal, Sri Lanka, and Tanzania.

Thus far, UNEP has been the Technical Support Partner for all the CAPP Programme Projects initiated during 2009-2012. However, it is expected that this work will be replicated in additional countries with different organisations taking the lead as TSPs, such as other UN bodies, regional or bilateral organisations, individual governments or non-governmental organisations.

CAPP Programme Projects help countries undertake the first three phases described in the *Flexible Framework Guidance*: the Initial, Assessment, and Development Phases. For each Implementing Country, the Project involves:

- the establishment of an inter-agency Task Force to facilitate collaboration and consultation among government bodies and, as appropriate, other stakeholders;
- preparation of two documents – a Country Situation Report and, following a needs assessment, a Roadmap for moving forward with an appropriate CAPP Programme; and
- organisation of training activities, in cooperation with the Technical Support Partner, to help officials, technical experts, and others to increase their understanding of issues related to chemical accident prevention and preparedness and improve the capacity of the officials and other experts.

An overview of a CAPP Programme Project is described in Chapter 2 of this ISP.

[9]This is a copy of Table IV from the *Flexible Framework Guidance* (subchapter B1)

b. What is this Implementation Support Package (ISP)?

This ISP was developed as a supplement to the *Flexible Framework Guidance*, to support CAPP Programme Projects. The UNEP Expert Working Group[10] recommended that the experience from the earliest CAPP Programme Projects be captured in a form that would facilitate similar activities in additional countries. Thus, the goal of this ISP is to build on experience, capturing key lessons learned and avoiding the need to duplicate efforts for each Implementing Country, while recognising the need to adapt each Project to local circumstances.

> *The Implementation Support Package constitutes an important pedagogical instrument for our countries which are developing hazardous chemicals facilities and, in most cases, without being sufficiently prepared to address accidents that may occur.*
>
> **Mrs. Fagamou Sy Diop**
> Ministry of Environment and Nature Protection, Senegal

Specifically, the ISP:

- describes a process for reviewing and improving chemical accident prevention and preparedness, setting out a series of steps for an Implementing Country to take with the help of a Technical Support Partner and describing training activities that might be needed, leading to the preparation of a Roadmap for further action;
- collects, in one package, general guidance as well as generic training materials and tools that can be adapted for use in connection with any CAPP Programme Project;
- includes guidance and materials for an Implementing Country (including the Focal Point(s), Task Force, and Training Participants); and
- includes guidance and materials for a Support Team (including the Technical Support Partner, collaborating organisations, and Instructors).

Thus, the ISP makes it easier and more efficient for any organisation to take on the role of Technical Support Partner in order to provide assistance to an Implementing Country.

Furthermore, by providing a peer-reviewed set of materials, this ISP also ensures that any Technical Support Partner has access to materials that have proven to be useful, that reflect good practice, and that are appropriate companions to the *Flexible Framework Guidance*.

It is not the intent of this ISP to provide strict rules or procedures to be followed; it is meant to be used to the extent that it is helpful, adapted to the needs and objectives of each Implementing Country.

This ISP manual will be supplemented with information on a web-portal that will be updated periodically (see www.unep.org/dtie). The web-portal will contain training materials from CAPP Programme Projects (*e.g.*, PowerPoint presentations and accompanying notes, interactive exercises, videos, and discussion questions) as well as case studies.

c. Reasons Why Countries Should Consider Implementing a Chemical Accident Prevention and Preparedness (CAPP) Programme

There are many reasons why countries should consider the need to strengthen chemical accident prevention and preparedness, *i.e.*, to save lives, protect human health, avoid environmental damage, and prevent economic losses. There are also political benefits to having an effective CAPP Programme (see subchapter A2 of the *Flexible Framework Guidance*).

All countries have facilities where hazardous chemicals are produced, used, stored, or otherwise handled. It is important to understand where these facilities are located and whether there are sufficient protection measures in place to reduce the likelihood of an accident (such as a fire, spill, or explosion) and to minimise harm to people, the environment, and property if an accident should occur.

[10]The Expert Working Group, consisting of representatives of international organisations, countries, and non-governmental organisations as well as independent experts, was established in connection with the Flexible Framework Initiative. This Group helped to develop the *Guidance* and this ISP, and provides technical and other support for the entire Flexible Framework Initiative including the CAPP Programme Projects.

Some hazardous installations may be obvious, such as a refinery or a large manufacturing facility. But significant chemical accidents can also occur at places which may not appear to pose a risk, such as:

- an ammonia release from a refrigeration facility;
- a dust explosion at a grain silo;
- a cyanide spill from mining operations;
- a fire at a warehouse that intermittently holds pesticides;
- a chlorine release from a water treatment plant;
- an explosion of a large number of LPG bottles at a distribution facility;
- a release of toxics from a waste treatment plant;
- an accident at a marshalling yard involving a train carrying one or more chemicals between two cities or to a neighbouring country; or
- an unexpected detonation of dynamite stored at a construction company.

These types of accidents can have devastating impacts on human health and the environment. For example, they can cause direct, immediate harm to workers and others in the vicinity who are exposed to harmful chemicals, or who are injured by an explosion or fire. Acute exposure to chemicals can also cause longer-term health consequences including chronic diseases and cancer. Furthermore, people can suffer harm from indirect contact as the result of contaminated drinking water, agricultural products, fish, or livestock.

The release of hazardous substances can also have serious environmental consequences, killing animals and vegetation, poisoning water supplies used for drinking, fishing, and irrigation, and rendering soil unfit for agriculture.

Such accidents often have significant and lasting economic consequences for the community near the accident. It is not only the enterprise where the accident occurred that may suffer major losses (from, *e.g.*, property damage, loss of jobs, closure of facilities for an extended period, or even bankruptcy). There may also be significant costs to local enterprises and others along the economic chain. For example, by polluting local waterways, an accident can result in increased costs for water used for industrial processes by neighbouring facilities. In addition, suppliers and customers of the enterprise where the accident occurred can be impacted and an accident can cause grave harm to agricultural and fishing industries in the area or downstream.

A country might decide to address chemical accidents because they have experienced the loss associated with a chemical accident or because they recognise that new or expected investments in industry may increase the hazards and risks of accidents and therefore there is increased pressure to take action. The *Flexible Framework Guidance* could provide a good starting point for their efforts.

The *Flexible Framework Guidance* and the ISP allow all countries to benefit from others' experience in addressing chemical accident prevention and preparedness. During the past three decades, many national and international organisations and enterprises established programmes and policies to improve chemical accident prevention, preparedness, and response following the devastating accidents in Seveso (Italy), Bhopal (India), and Basel (Switzerland) as well as other major accidents that occurred in the 1970's and 1980's.

While it is difficult to calculate the costs and benefits of implementing a chemical accidents programme, there is convincing evidence that accident prevention and preparedness is a wise investment, with the costs involved in improving safety being less than the cost of accidents. There are also collateral economic benefits to implementing CAPP Programmes. For example, such Programmes often lead to greater efficiency and lower production costs, as well as to overall improvements in the health, safety, and environmental performance of an enterprise. Safe operations also protect the good will and reputation of industry and public authorities, as well as foster improved relationships among different government bodies and between government and industry, as well as between industry and the public.

Chapter 2:
CAPP PROGRAMME PROJECTS:
Overview and Reports to be Developed by Implementing Countries

This Chapter provides an overview of a typical CAPP Programme Project (Part a) and highlights the two reports that are expected to be developed by any Implementing Country: the Country Situation Report and the Roadmap (Parts b and c, respectively).

a. CAPP Programme Projects: Overview

The following overview of the steps generally followed during a CAPP Programme Project should help guide an Implementing Country's Project planning.

Text Box 2 provides an overview of a CAPP Programme Project, which is further described below, and Figure (b) sets out the typical structure for a Project. Based on experience from the past Projects, it takes between 18 months and two years to complete a Project. However, each Country will need to adapt the structure and timing of its Project to its own circumstances.

It is important to recognise that the Project represents just the first steps in addressing chemical accident prevention and preparedness, involving phases 1-3 of the five-phase process described in the *Flexible Framework Guidance*. The next steps involve the further development and implementation of a CAPP Programme, an on-going process, which should be elaborated in the Implementing Country's Roadmap agreed to at the end of the Project.

Text Box 2

OVERVIEW OF A CAPP PROGRAMME PROJECT

Initiating the CAPP Programme Project: Following a request for assistance, the Technical Support Partner engages in consultations with the Implementing Country to confirm that the Country is in a position to move forward and, if so, to design an appropriate Project. After initial preparations, an Inception Workshop officially launches the Project.

Establishing an Inter-agency Task Force: The Focal Point, with guidance from the Technical Support Partner, establishes a national Task Force to drive the Project.

Preparing the Country Situation Report: The Implementing Country prepares a Report that outlines the Country's vulnerability to chemical accidents and its legal/regulatory framework related to chemical accident prevention and preparedness.

Building Capacity/Training: Training sessions are held for cross-sectoral audiences to increase capacity for dealing with prevention of, and preparedness for, chemical accidents and chemical risk management.

Preparing the Roadmap – Path to CAPP Programme Development: The Implementing Country drafts a Roadmap which defines the Country's priorities to establish or improve its CAPP Programme, and specifies the steps towards identified goals. The Roadmap builds on a needs assessment.

Launching a CAPP Programme: A Project conclusion workshop ("CAPP Launching Workshop") is held, which focuses on sharing experiences, building on lessons learned, and presenting the Roadmap, including an action plan for implementing CAPP-related activities.

Initiating the CAPP Programme Project

The following outlines the typical activities that occur before the official start of a CAPP Programme Project.

- *A Request:* A Project generally begins with a request for assistance by a contact point in the Implementing Country, directed to UNEP or other Technical Support Partner.
- *Consultations:* The Implementing Country and Technical Support Partner consult on a number of key issues that should be resolved before starting the Project. These issues could involve, for example: whether there is the necessary support within the Implementing Country (including financial and political support); who should be involved in the Country's Task Force; the scope of the proposed Project; and when to schedule key activities.

  Once there is agreement to move forward, the contact point and the Technical Support Partner should agree on the Project objectives and discuss planned activities and a related timetable, taking into account the resources that are available. A Country may conclude that resource constraints dictate that the Project starts with a limited scope by, for example, focusing on certain industries of concern or a narrowing of the geographic scope. While the goal should always be to address hazardous installations throughout the Country, this could be achieved in a series of steps.
- *Funding:* If needed, the Technical Support Partner works with the Implementing Country to identify potential sources of additional financial support, to complement any resources committed by the Country.
- *Designation of Focal Point(s) and Internal Discussions:* The Implementing Country designates a Focal Point(s), who is delegated with authority to work with the Technical Support Partner, make decisions concerning the organisation of the Project, reach out to key stakeholders in the Country, and take the steps necessary to prepare for the first activities. The Focal Point(s) initiates internal discussions to ensure that there is sufficient interest in the Project, involving appropriate senior-level officials, in order that there will be continuing support and implementation of key decisions related to the Project.
- *External Collaborators:* The Technical Support Partner seeks to identify appropriate collaborators (*e.g.*, regional centres or training institutes) and external experts (Instructors) to create a Support Team, taking into account the expertise present in the Implementing Country.
- *Start-up ("Scoping") Meeting:* An in-country Scoping Meeting is scheduled approximately two months before the Project Inception Workshop. During this Scoping Meeting, the Technical Support Partner (and, as appropriate, other members of the Support Team) meet with representatives of the Implementing Country to discuss the Project, identify the main objectives and activities, and explain the roles of the Implementing Country and of the Support Team. The Country should involve key partners in this meeting including senior officials with the authority, experience and leadership to approve the Project and move it forward. If resources are not available to organise such a Meeting within the Implementing Country, then a (series of) discussion(s) should be arranged via video-conferencing or conference call.
- *Project Inception Workshop:* A national Inception Workshop, the official launching of the Project, is organised to raise awareness about chemical accident prevention and to identify all relevant stakeholders for the Project (this is further described under *Building Capacity/Training*).

Establishing an Inter-agency Task Force

The Task Force is created, bringing together officials from relevant government bodies and, as appropriate, industry and other non-governmental organisations. This Task Force may be a newly constituted body, or it could be an existing committee or working group that is designated as the Task Force for purposes of the Project.

The Task Force is responsible for leading the CAPP Programme Project, maintaining momentum, helping to ensure that there is the necessary support from within the Country, and managing the preparation of the Country Situation Report and Roadmap. The Task Force meets regularly, and consults with other stakeholders, throughout the course of the Project.

Further guidance for the Task Force is set out in Chapter 3(c) and Annex III.

Preparing the Country Situation Report

The Country Situation Report is drafted, providing an overview of the factors relevant to the development of a national CAPP Programme such as the nature and level of risks of chemical accidents and the legal/ administrative/policy framework that can be used to address these risks.

Preparation of the Country Situation Report is an on-going process, to be refined and updated during the course of Project, as further insights are gained.

Part b of this Chapter and Annex I provide further information about how to prepare the Report and its contents.

Building Capacity/Training

A typical CAPP Programme Project includes (less technical) Workshops as well as (technical) Training Sessions. Scheduling of these capacity-building activities is based on discussions between the Implementing Country and the Technical Support Partner. The number and length of these capacity-building activities, and the subjects covered, are dependent on the needs and interests of the Implementing Country.

- *Workshops* are intended for a broad audience, including senior decision-makers as well as experts, to brief Participants on key issues, to get support for further activities, and to identify steps for moving forward. The Workshops include an Inception Workshop at the beginning of the Project and the CAPP Launching Workshop at the end of the Project.

  The objectives of the Inception Workshop, which officially begins the CAPP Programme Project, are to gain an increased understanding of the issues and benefits of a CAPP Programme and a commitment to move forward with the Project. It is expected that decision-makers from the key government bodies will participate in the Inception Workshop.

  Specifically, the Inception Workshop serves to: raise awareness of the importance of implementing an appropriate CAPP Programme; provide an overview of the Flexible Framework Initiative; explain the expected activities and outcomes of the Project; review the Country's situation in terms of chemical risk management and accident prevention; discuss the roles of the Implementing Country and the Technical Support Partner during the Project; identify next steps; and get a commitment to move forward.

  In addition, the Workshop should generate information (and identify further sources) needed to further develop the Country Situation Report and support additional training (see Annex VI for a Generic Agenda for an Inception Workshop).

  The CAPP Launching Workshop is the final activity of the CAPP Programme Project, bringing together senior officials and decision-makers (who preferably also attended the Inception Workshop), as well as the technical experts who participated in the Training Sessions. The purpose of this Workshop is to review the activities that have been completed during the Project and reach agreement on a Roadmap describing a strategy and steps for development and implementation of a CAPP Programme (see Annex VIII for a Generic Agenda for a CAPP Launching Workshop).

- *Training Sessions* are designed to: explain general concepts related to chemical accident prevention and preparedness; introduce the Country Situation Report and improve understanding of the national situation; identify the typical elements of a CAPP Programme; describe the *Flexible Framework Guidance* and how it can be used to develop a national CAPP Programme; outline the roles and responsibilities of various stakeholders in improving chemical safety; explain key concepts such as hazard identification and risk assessment; provide technical training on specific topics; teach specific skills needed to develop and implement a CAPP Programme; and help identify gaps in existing policies and programmes to facilitate the development of a Roadmap (see Annex VII for a Generic Curriculum for Training Sessions).

Experience with the Pilot Projects suggest that the Training Sessions will consist of one, two, or three events totaling four to ten days. An additional "Introductory Training Session" may be scheduled, when needed, to provide Participants with a common understanding of basic concepts such as hazard, risk, hazardous substances, and chemical accidents.

> *This Project is different than others: the Country Situation Report, Needs Assessment, and Roadmap were created by Cambodians for our own use with support from UNEP and other experts.*
>
> **H.E. Mr. Khieu Muth**
> Secretary of State, Ministry of Environment
> Kingdom of Cambodia

Participants in the Training Sessions include technical experts and decision-makers from relevant government bodies, as well as representatives from the private sector, who will have a role in the development and/or implementation of the Country's CAPP Programme. It is very helpful for Participants to attend all the Training Sessions since each will build on the previous Sessions.

Preparing the Roadmap: Path to CAPP Programme Development

A CAPP Programme Project culminates in the development of a Roadmap. The Roadmap includes: a "needs assessment" which identifies gaps in regulations, policies, or programmes; identification of relevant expertise and training needs, funding, and equipment available for CAPP Programme activities; a description of priorities for future action; a strategy for moving forward, which includes a timetable for action and assignment of lead organisations; and an estimate of the resources that will be needed.

The draft Roadmap is reviewed and approved at the CAPP Launching Workshop, recognising that it will be revised periodically as experience is gained.

Part c of this Chapter and Annex II provide further information about how to prepare the Roadmap and its contents.

Launching the CAPP Programme (After the CAPP Programme Project)

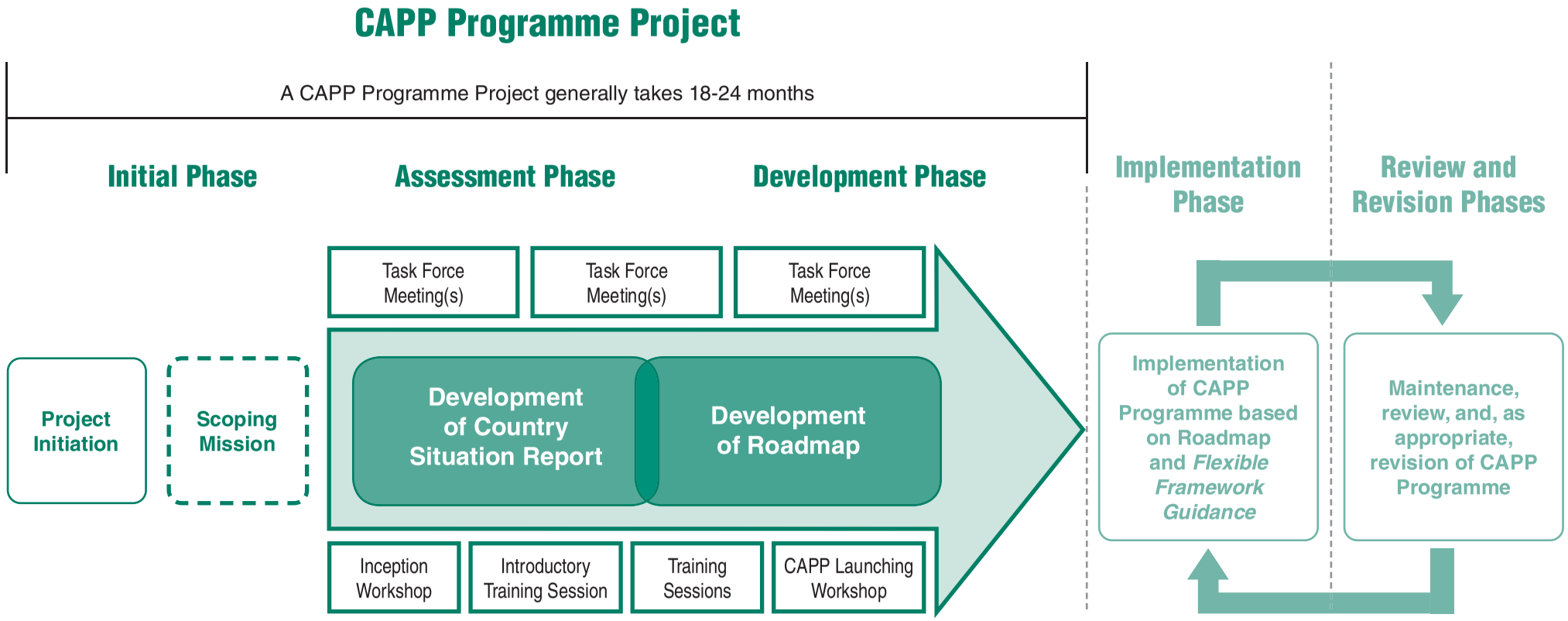
As described above, the final activity of the Project is the CAPP Launching Workshop. Efforts toward a sound CAPP Programme continue after the CAPP Programme Project with, for example, the following activities:

- *Development and Implementation of a CAPP Programme:* Generally, work related to the Development Phase is not completed by the end of the Project so the Roadmap will describe the further work that may be needed to develop the CAPP Programme as well as the efforts needed for implementation of the Programme.

  The Implementation Phase is an ongoing process guided by the Roadmap. Each Country will define its priority actions and milestones in light of local needs and resource availability. The steps needed to create and implement laws, regulations, policies, and programmes generally will take a number of years. It is important to recognise that even the small actions along the way to completing the steps are important and will lead to improved safety.
- *Review and Revision of a CAPP Programme:* This is the final phase of the five-phase process. During the Review/Revision Phase, mechanisms are established to help "measure" achievements. This does not require an extensive and costly analysis. Countries should strive to identify several key indicators to inform them of whether the actions they are taking are actually leading to improved safety and whether there may be more effective and/or efficient alternatives.[11]
- *Continuation of Task Force:* The Task Force, or successor organisation, should remain active after the Project to support the further efforts needed to develop and implement the CAPP Programme and to periodically review and revise the Programme, as appropriate. The Technical Support Partner, while no longer formally involved, should remain available to answer questions and to provide help, to the extent possible.
- *Sharing Experience:* After the CAPP Launching Workshop, and the approval of the Country's Roadmap, it may be valuable to hold a regional meeting among countries with similar interests, to serve as a platform for sharing lessons learned.

[11]For more information on Safety Performance Indicators (SPIs), see the *OECD Guidance on Safety Performance Indicators*: http://www.oecd.org/dataoecd/60/39/21568440.pdf

Figure (b): Structure of a Typical CAPP Programme Project



b. Country Situation Report: Overview and Guidance for Preparation

A satisfactory Country Situation Report is critical to the success of any country's CAPP Programme Project.

What is the Country Situation Report?

The Report, which compiles relevant information about the nature and extent of the hazards and risks as well as the Implementing Country's capabilities and resources for addressing these hazards and risks, serves as a tool throughout the CAPP Programme Project. It provides a starting point for the development and implementation of appropriate laws, policies, and programmes for improved chemical accident prevention and preparedness, as well as a basis for evaluating and prioritising needs.

Thus, the Country Situation Report provides a mechanism for addressing the "Assessment Phase" (as described in subchapter B3 of the *Flexible Framework Guidance*) and sets the stage for the Development Phase (as described in subchapter B4).

Specifically, the Country Situation Report:

- provides insights on the types and locations of the hazardous installations;
- creates an overview of existing legal and non-regulatory measures and the impact they are having on chemical safety;
- serves as a tool to reach a common understanding, among key government bodies and other stakeholders, of the circumstances and resources available for developing a CAPP Programme (thus facilitating the decision-making process);
- identifies important gaps in addressing chemical accident hazards and risks which, in turn, provides the basis for creating a needs assessment, a key element of the Roadmap; and
- informs the Task Force, Technical Support Partner, and Instructors to help them create country-specific training and support activities.

In addition, the preparation of the Report generally leads to improved communications and relations among public and private sector groups and provides a learning experience for those involved in the development and review process.

Experience has shown that the process of developing the Country Situation Report is, in itself, an important learning experience, providing new insights on the extent of the legal and non-regulatory measures that exist, the degree of implementation of these measures, and the impact that they are having on chemical safety.

Since the Report helps the Implementing Country as it moves into the implementation and Review/Revision phases, it is valuable to regularly update the Report.

Contents of a Country Situation Report

The Generic Template and related guidance for a Country Situation Report (see Annex I) is set out in nine parts: (1) Background Information; (2) Accident Potential and History; (3) Government Infrastructure; (4) Regulatory and Non-regulatory Context; (5) Non-governmental Activities; (6) Community Awareness; (7) Available Resources; (8) Other Relevant Information; and (9) Conclusions.

In developing the Report, the goal should not be to prepare an extensive document requiring significant resources and time to complete. Rather, those responsible for the Report should do their best to create an accurate picture of the Country's situation based on information that is easily available, and to present the information in a format that is simple to read and understand. Implementing Countries need to take into account the resources available for this Report and set priorities to allocate funds and expertise to the most important tasks.

To the extent practical, the Country Situation Report should contain information on:

- existing facilities where there may be significant quantities of hazardous chemicals[12] including their location, the type and quantity of hazardous substances, the vulnerability of nearby populations, the prevention methods in place, and existing preparedness activities at the facilities;
- past chemical accidents in the Country (and, as appropriate, in neighbouring countries);

[12]See Chapter A3 of the *Flexible Framework Guidance* (pages 7-9) for examples of such facilities.

- government bodies (ministries, agencies, departments, offices) with responsibilities related to chemical accident prevention and preparedness including, as appropriate, regional and local authorities;
- existing and planned laws, policies, and activities that are relevant (at national, local, and regional levels) such as those addressing chemicals management, health and safety inspections, public health, environmental impact assessments, labelling for hazardous substances, pesticides management, fire prevention, explosives, transport, etc.;
- related activities (governmental and non-governmental), including those at national, regional, and local levels;
- international agreements and initiatives that the Country participates in, such as the accident related conventions of the ILO and the UNECE, and the initiatives of UNEP and WHO related to chemicals management;
- community awareness concerning hazardous installations and preparedness efforts involving the public (including information programmes for community members living and working near hazardous installations); and
- access to resources that are, or can be, available to address issues related to chemical accident prevention and preparedness (including, *e.g.*, experts, information, technology, and funding).

It is extremely valuable for the Report to include a map (or maps) of the Country which identifies the location of key areas including, for example, industrial zones, ports, mining facilities, agricultural areas, transportation routes, and population centres.

Most countries will find that the first draft of their Country Situation Report will contain gaps. For example, in many countries there is no system for collecting accident reports and, therefore, the part related to "Accident Potential and History" may only contain limited information from news clippings, fire department reports, and anecdotal stories. The Implementing Country may be able to fill in some of the gaps during the course of the CAPP Programme Project.

How to Develop a Country Situation Report

The Task Force is responsible for managing the development of the Country Situation Report. The Task Force might establish a subgroup or assign government expert(s) to collect information and draft the Report, or they may hire consultant(s) for this purpose.[13] The Task Force may wish to host a working session(s) bringing together a group of officials and experts who have the information, expertise, and experience to contribute to the Report.

The Task Force should set up a process to inform the Technical Support Partner about the process for developing the Report. The TSP normally is available to help with the Report and to provide feedback, but it is important that the Report is prepared by the Implementing Country and reflects the Country's own understanding of the relevant factors.

As noted above, gathering or generating the information for the Country Situation Report should not be an onerous or long-term process. Rather, the focus should be on accessing information that is readily available from official or unofficial sources, and then seeking to fill in gaps through simple means such as newspaper reports, web searches, questionnaires, or interviews.

Government files and records will likely provide the bulk of information for the Report. While official and verified sources of information are preferable, the Report will also benefit from unofficial sources of relevant information in order to create as complete a picture as possible. By collating information from a number of different sources, the Country will gain a more holistic picture of the domestic industry and other key factors and may improve relations among public and private sector groups.

All governments have a number of sources of information that can be useful for the Country Situation Report. It is helpful to be creative in identifying these sources, since they might not be obvious at the outset. For example, health/hospital records may reveal instances of toxic poisoning from the release of chemicals or injuries from a fire involving chemicals. For further examples of information sources, see Text Box 3.

Some individual companies may volunteer to provide information; however, an Implementing Country generally should not focus on reaching out to facilities throughout the Country since gathering information from individual sites can be a long and time-consuming process.

[13]Ideally, the consultant(s) will have experience with the relevant industry as well as insights into the Country's laws and administrative framework.

A draft Report should be provided to the Technical Support Partner at least one month before the start of the Training Sessions (or, if scheduled, the Introductory Training Session) in order that the curriculum, as well as individual presentations, can be adapted to the Country's specific facts and circumstances.

The Report should continue to evolve and be used throughout the Project, and should be reviewed and revised during Task Force meetings taking into account input from Workshop and Training Session Participants.

Text Box 3

LOCAL SOURCES OF INFORMATION FOR CREATING A COUNTRY SITUATION REPORT

- National laws and government records/databases/files.
  - This could include information that was generated for purposes not directly related to chemical accident prevention and preparedness such as: import/export data; environmental permits; industry licenses; labour or fire inspection reports; reports from emergency response services; local government files identifying locations of key industries; and toxic release inventories.
- Documents prepared for chemicals-related conventions[14] or other international initiatives. This could include the National Chemicals Management Profile[15] (copies of countries' National Profiles can be found at http://www2.unitar.org/cwm/nphomepage). See also Text Box 4 of the *Flexible Framework Guidance*.
- Information from local or regional government bodies including, for example, fire service inspections and response reports.
- Medical/hospital records.
- Newspaper reports describing chemical accidents or announcing new industrial developments.
- Internet searches.
- Records from enterprises that produce or use hazardous materials or from industry associations (to the extent easily accessible).
- Reports produced by universities or research institutes.
- Interviews with experts and other interested parties including, for example, representatives of communities near hazardous installations.

c. Roadmap: Overview and Guidance for Preparation

The Roadmap is the culmination of any CAPP Programme Project, analysing the Country's needs and priorities, setting the stage for improving chemical accident prevention and preparedness, and identifying the next steps in the establishment of a CAPP Programme.

The following information and the Generic Template in Annex II have been prepared to assist countries when preparing a Roadmap.

What is the Roadmap?

The purpose of the Roadmap is to set out an overall plan for achieving the Implementing Country's objectives with respect to a CAPP Programme. It should contain information in sufficient detail to: identify needs and priorities; describe next steps; provide milestones; and generally guide actions for the short-, medium-, and longer-term. Since the Roadmap is based on a country's circumstances and resources, each Implementing Country's Roadmap will look different and will be written in a format that works best for that Country.

To be effective, the Roadmap should be an official document, endorsed by appropriate authorities. Therefore, it needs to be well-considered, requiring substantial care and time to generate the strategies and steps for moving forward.

[14] A list of possible Conventions and international initiatives is available in Annex I (Text Box 17).

[15] Countries all over the world have embarked on the preparation of National Chemicals Management Profiles with the involvement of a wide range of national stakeholders, following the recommendations issued by the Intergovernmental Forum on Chemical Safety (IFCS) and the Strategic Approach to International Chemicals Management (SAICM), based on the UNITAR/IOMC National Profile Guidance Document. The first edition was published in 1996 and a second edition was issued in 2012 (entitled "Preparing a National Profile to Assess Infrastructure and Capacity Needs for Chemicals Management").

The Roadmap will include some activities that can be completed relatively quickly with existing resources, as well as activities that will take several years and may require new funding or hiring of technical experts. While achieving the specified goals and completing all the steps described in the Roadmap is generally a multi-year process, each step is valuable, representing an improvement in some aspects of chemical safety.

The Roadmap should clearly identify the individuals or groups who will be responsible for: leading the effort to implement each part of action plans; monitoring activities; assessing progress; and suggesting updates. In most cases, the Task Force or its successor body will be assigned these responsibilities.

It is important that the Roadmap set out a realistic, practical approach that takes into account actual needs and access to resources, rather than try to create an ideal or comprehensive CAPP Programme that will divert limited resources away from the most important actions.

Contents of the Roadmap

The Generic Template and related guidance for the Roadmap (see Annex II) contains six parts: (1) Introduction and Background; (2) Needs Assessment; (3) National CAPP Programme Goals and Strategies; (4) Action Plan; (5) Mobilising Resources; and (6) Conclusions and Recommendations.

Each Implementing Country should decide how to adapt these six parts, and which additional parts should be introduced into their Roadmap, taking into account a realistic assessment of needs and resources.

The Roadmap builds on a "needs assessment" that identifies gaps and areas of concern in existing regulatory controls and institutional mechanisms, and describes resource requirements (including expertise, equipment, and funding). The needs assessment should take into account the Country Situation Report as well as insights gained during the Workshops and Training Sessions.

Furthermore, the Roadmap should:

- review the achievements of the CAPP Programme Project;
- identify the Country's overall goals and priorities with respect to its CAPP Programme;
- specify a strategy for moving forward after the conclusion of the Project, towards the development and implementation of a Programme that is consistent with the goals and priorities;
- identify resources that are, or may be, available to support this effort; and
- elaborate the activities that realistically can be undertaken in the first year or two (along with a timetable and assignment of responsibilities for taking action) and describe longer-term activities.

How to Develop the Roadmap

The Task Force is responsible for developing the Roadmap, with the support of the Technical Support Partner and any subgroup, expert(s), and/or consultant(s) engaged by the Task Force.[16] The Focal Point and TSP might facilitate this effort by, for example, helping to identify experts and/or organise a special session(s) on Roadmap development. Many countries will choose to establish a small group with representatives of the most relevant agencies, charged with developing the Roadmap. The TSP should be informed about the process for developing the Roadmap.

Developing the Roadmap is generally an iterative process that continues throughout the CAPP Programme Project, with a number of parts being drafted simultaneously. In most cases, the bulk of the work occurs between the second and third series of the Task Force meetings (see Figure (b)), in preparation for the CAPP Launching Workshop. Workshop Participants should have the opportunity to review a draft Roadmap and suggest modifications before it is finalised and officially approved.

The Roadmap should be reviewed and updated periodically after the CAPP Programme Project (*e.g.*, every twelve months), to assess whether the stated objectives, priorities, and activities are still valid and whether the Roadmap should be updated based on progress made, resource availability, or any other relevant changes in the national situation.

While the Technical Support Partner generally will not have any formal arrangement with the Implementing Country after the conclusion of the CAPP Programme Project, the TSP should be available to provide advice with respect to the Roadmap implementation.

[16]The Country Situation Report will generally provide insights for the development of the initial draft of the Roadmap. Thus, the expert(s)/consultant(s) responsible for the Country Situation Report might be asked to also work on the Roadmap.

Chapter 3:
IMPLEMENTING COUNTRY:
Guidance and Materials

This Chapter contains four parts:

- Part a: providing an overview of what is expected from the Implementing Country during a CAPP Programme Project;
- Part b: addressing the Focal Point(s), *i.e.*, the representative(s) from the Implementing Country who are the liaison between the Country and the Technical Support Partner(s);
- Part c: addressing the Task Force, which is an inter-agency body established by an Implementing Country to lead the effort and drive the process during the CAPP Programme Project; and
- Part d: addressing the Training Participants, *i.e.*, all the individuals that comprise the audience for the Workshops or Training Sessions that are part of the CAPP Programme Project.

a. Role of the Implementing Country: Overview

The process described in this ISP – called a CAPP Programme Project – is initiated by the potential Implementing Country, expressing an interest to UNEP or another Technical Support Partner and enquiring about the possibility of having outside support to address chemical accident prevention and preparedness.

Before moving forward with a CAPP Programme Project, there should be a reasonable assurance that the following prerequisites are in place in the Implementing Country:

- political support from high level officials (*i.e.*, those with the authority, experience, and leadership to move the process forward, with a view to achieving an improved national CAPP Programme). It is important to secure and maintain political support. Since the issue of chemical accident prevention and preparedness is not generally part of political discussions (unless there has been a recent accident), it may be necessary to brief decision-makers on why having a CAPP Programme is important for business, health, and environmental reasons. See Text Box 4 containing ideas on building and maintaining such political commitment;
- a willingness by the various government bodies with responsibilities related to chemical safety to collaborate and to consult with non-governmental stakeholders; and
- an appropriate allocation of personnel and other resources to complete the Project.

Once the Project is launched, the following summarises the most important actions that are the responsibility of the Implementing Country:

- identify an individual(s) within a relevant agency/ organisation to be the Country's primary liaison with the Technical Support Partner (called the "Focal Point");
- engage in consultations with UNEP (or other Technical Support Partner) in order to reach agreement on the goals, expected outcomes, and workplan for the Project;
- establish an effective Task Force, which means involving all relevant government bodies as well as key non-governmental stakeholders, meeting on a regular basis, and carrying out its responsibilities (see Part c);

> *We are used to response, but here we are going to discuss prevention. We need to build capacity and expertise on prevention, which is a totally new paradigm shift.*
>
> **Mr. Geri Geronimo Sañez**
> Chief, Hazardous Waste Management Section
> Environmental Management Bureau
> The Philippines

- create a system for engaging/consulting with other relevant stakeholders (such as representatives of different affected industries, labour associations, local communities, and community-based organisations) during the course of the Project;
- prepare a Country Situation Report and Roadmap (see Chapter 2 and Annexes I and II respectively for generic templates), respecting the schedule set out in the workplan;
- provide logistical support for the workshops and training sessions. This includes helping to make sure that there is appropriate participation, functional facilities (including, as needed, interpretation services) and that materials are translated and available on a timely basis (see Text Box 5 related to logistical arrangements); and
- undertake follow-up activities, as identified in the Roadmap.

It is important that every Implementing Country has ownership of its CAPP Programme Project, and does not depend on the Technical Support Partner for Project management.

Text Box 4

BUILDING POLITICAL COMMITMENT

For most countries, there are compelling reasons – economic, environmental, health, and political – for reviewing and improving chemical accident prevention and preparedness.

Economic Development

There is persuasive evidence that accident prevention and preparedness is a wise investment, with the costs involved in improving safety being less that the cost of dealing with accidents. Furthermore, there are a number of benefits to having safer industries. In this regard:

- an appropriate regulatory and policy infrastructure could help to attract business (especially international companies);
- improvements made to reduce accident risks generally have direct economic benefits in terms of increasing the efficiency of operations, improving productivity, facilitating access to financing, and lowering insurance premiums; and
- preventing accidents avoids property damage and other economic losses to the company as well as to the community and other nearby companies.

Health Impacts

Chemical accidents can have devastating impacts on human health, to both employees and the public in surrounding communities. For example:

- such accidents can cause direct immediate harm to anyone who is exposed to toxics or other hazardous chemicals or who is injured by a fire or explosion;
- acute exposure to chemicals can also cause longer-term health consequences such as chronic illnesses and cancer; and
- people can suffer harm from indirect contact as a result of contaminated drinking water, agricultural products, fish, or livestock.

Environmental Protection

- Chemical accident prevention and preparedness is a key element in the overall field of chemical risk management and, more generally, sustainable development.
- Chemical accidents often have serious environmental consequences, killing animals and vegetation, poisoning water supplies used for drinking, fishing and irrigation, and rendering soil unfit for agriculture.

Political Benefits

- A CAPP Programme can provide a platform for improving communication and trust between local leaders, the public and other stakeholders. Furthermore, communities typically blame political leaders for accidents, especially if there was not adequate warning or appropriate response.
- Taking action in this area can help a country comply with international agreements related to reducing chemical risks and can support overall efforts to improve safety in the country. In this regard, ratifying a convention or actively participating in international activities may provide a means for accessing additional resources to support national chemical safety activities.
- Improving accident prevention and preparedness can provide a basis for other international collaboration and sharing of experience in health, safety, and environmental control.
- A CAPP Programme can provide a basis for improved relations with neighbouring countries, especially if there are hazardous installations near borders or on international rivers.

b. Focal Points: Guidance

What is the role of Focal Points?

A Focal Point(s) is designated by the Implementing Country to serve as the primary liaison between the Country and the Technical Support Partner and to facilitate communications among stakeholders in the Country. The Focal Point(s) is critical to the success of the CAPP Programme Project by providing a central contact point for correspondence and by taking the lead in internal consultations for moving the process forward, especially before the Task Force is established. Generally, the Focal Point(s) serves as the local Project manager, although this responsibility may be assigned to someone else. In addition, the Focal Point(s) will often participate in the Task Force.

Who should be Focal Points?

It is up to each Implementing Country to determine who should serve as the Focal Point(s). In most cases, this will assigned to individuals in a particular office within one of the government bodies responsible for some aspect of accident prevention or preparedness (such as an agency/ministry responsible for environmental protection, public health, labour safety, emergency response, industry, or civil defence), or it may be one responsible for international relations.

An Implementing Country can designate more than one Focal Point. For example, a Country might have one Focal Point responsible for logistical issues and a different one for substantive issues. Alternatively, there may be a division of responsibilities with respect to external and internal consultations. If there is more than one Focal Point, it needs to be clear how responsibilities are allocated and who has the lead for corresponding with the Technical Support Partner. Whoever is designated to serve as the primary contact with the TSP should be able to communicate in a language spoken by the TSP.

What are the key activities of the Focal Points?

The role of the Focal Point(s) involves:

- acting as the key contact in the Implementing Country for consultations with the Technical Support Partner and other external organisation(s) involved with the CAPP Programme Project, as well as serving as the liaison between the TSP and others in the Country. In addition, the Focal Point should provide the TSP with information about the Country, to help in the planning of Workshops and Training Sessions, and should respond to any inquiries by the TSP;
- helping to establish the scope and objectives of its Country's CAPP Programme Project, in collaboration with others in the Country, which should be agreed and shared with the Technical Support Partner before the start of a CAPP Programme Project;
- managing the CAPP Programme Project, helping to maintain momentum in order that the process continues to move forward. This involves administrative responsibilities such as managing the Project budget, ensuring that deadlines are met, and coordinating internal discussions;
- facilitating the creation of the Task Force, by reaching out to the government bodies with responsibilities that are relevant to chemical accident prevention and preparedness. In some cases, the Focal Point will serve as the lead or chair of the Task Force;
- working with the Task Force to engage other stakeholders, helping to identify which non-governmental organisations should be consulted during the Project. Generally, this will include representatives of industry, community-based organisations, and research institutes/universities. It also may involve, as appropriate, local government authorities and emergency response personnel; and
- coordinating the substantive and logistical arrangements for Workshops and Training Sessions, in consultation with the Technical Support Partner. This includes managing the timely translation and distribution of key documents, starting with the *Flexible Framework Guidance.* See Text Box 5 for more guidance related to the logistical arrangements.

Text Box 5

LOGISTICAL ARRANGEMENTS FOR WORKSHOPS AND TRAINING SESSIONS

It is important for the Implementing Country to assign someone (or a small group of individuals) as responsible for the logistical arrangements, and related budget, for each of the Workshops and Training Sessions.

The choice of venue is critical to the success of any training activity. For example: the venue needs to have sufficient seating in an appropriate arrangement so that all Participants can comfortably hear and see presentations and can participate in discussions; there should be desks or tables so that Participants can take notes and use their handbooks; and there should be appropriate space for any planned activities (for example, breakout sessions or exercises).

Furthermore, it is extremely valuable for the venue to inspire informal discussions and networking among Instructors and Participants. This could involve providing a space and opportunity for discussions during breaks and after the scheduled sessions. For one Pilot Project, the Training Sessions were held at a conference centre away from the capital city allowing Participants and Instructors to spend evenings together. The feedback from that Project was that the venue added significant value to the experience because of the opportunities for everyone to share ideas in an informal setting.

There are a number of other questions that need to be addressed when making the arrangements for a Workshop or Training Session, such as:

- Participation: how to identify who to invite; how to ensure that the invitations are sent out, and responses received, in a timely manner; and how to ensure that a contact list for all Participants is maintained?
- Support Team: what information should be provided in advance to the Technical Support Partner and other members of the Support Team; and what logistical assistance should be provided to the Support Team (*e.g.*, to make travel arrangements and complete visa requirements)?
- Technology: is there appropriate and reliable technology available in the room (*e.g.*, power supply, internet access, microphones, projection equipment for presentations and videos); and what to do in the case of a technology malfunction?
- Documentation: how is timely translation and distribution of materials to Participants ensured (including, as appropriate, the *Flexible Framework Guidance* and a Participants' Handbook which is described in Text Box 8)?
- Interpretation: is there a need for simultaneous interpretation[17] and, if so, are there appropriate arrangements to have qualified interpreters (*i.e.*, with the ability to translate technical terminology) along with appropriate audio equipment; and will the interpreters receive materials in advance in order to be adequately prepared?
- Registration: are arrangements in place for registering participants (including, as appropriate, distribution of materials, name tags, confirming contact information)?
- Food and drink: are arrangements in place for coffee/tea and lunch breaks and, as appropriate, for other meals?
- Industrial Site visits: have arrangements been made for site visits, including coordinating with the host facilities, scheduling necessary transportation, and ensuring that appropriate personal protective equipment is available?

c. Task Force: Guidance

What is the role of the Task Force?

The Task Force is an inter-agency body responsible for leading the effort to develop and facilitate the implementation of a CAPP Programme. This involves maintaining the political commitment, championing the effort in their country, ensuring consultation with relevant government and non-governmental stakeholders, securing the resources needed, and managing the CAPP Programme Project (including preparation of the Country Situation Report and Roadmap).

It is important that the Task Force meets regularly. It should have a clearly identified chair (or co-chairs) to ensure that someone has convening authority (see Text Box 6 related to Guidance for Task Force Meetings).

While this ISP focuses on the role of the Task Force during the course of the CAPP Programme Project, the Task Force (or similar body) should continue to remain engaged afterwards to facilitate implementation of the

[17]Experience has indicated that sequential interpretation is not effective.

CAPP Programme. In this regard, the Task Force can help to: ensure appropriate follow-up to the Roadmap; maintain political support; coordinate different government bodies; engage non-governmental stakeholders; and facilitate the periodic review and revision of the Programme.

Who should be included in the Task Force?

A Task Force consists of officials from key government ministries and agencies and, as appropriate, non-governmental organisations that are – or should be – involved with chemical accident prevention and preparedness. The Task Force can be a new body established for the CAPP Programme Project or it can be an existing body that is assigned the responsibilities of the Task Force.

One of the strengths of any CAPP Programme Project is the composition and commitment of the Task Force and, therefore, care should be taken to establish the appropriate membership and leadership, and to ensure that the Task Force meets on a regular basis to carry out its responsibilities.

In creating a Task Force, the goal should be to be inclusive, with relevant interests represented, but without becoming so large that it is too cumbersome for it to carry out its mission.[18] It is up to each Implementing Country to decide on a structure that will best meet its needs.

The composition of the Task Force will differ among countries but typically includes representatives of the ministries/agencies responsible for:

- environmental protection;
- public health;
- labour safety and/or occupational safety and health and/or industrial safety;
- industrial development/industrial estates;
- mining;
- agriculture and/or pesticides;
- transportation;
- energy and/or petroleum and/or fossil fuels;
- land-use planning;
- civil defence/civil protection;
- customs and/or exports and imports;
- labelling and packaging;
- safety of ports and other transport interfaces (marshalling yards, airports);
- disaster management or risk reduction; and
- emergency response (fire, police, medical).

In identifying the individuals who should be assigned from each ministry/agency, the Implementing Country should take into account that Task Force members should be at a sufficiently high level and have the experience and leadership qualities needed to help maintain political commitment and ensure that Task Force decisions will be implemented. In addition, it is very valuable to have consistent participation of the Task Force members throughout the period of the CAPP Programme Project, to the extent possible.

In addition to representatives of national ministries/agencies, the Task Force could also include officials from regional and/or local government bodies especially if hazardous installations are located in limited geographic areas.

Furthermore, the Task Force could include representatives of industry, labour, universities, research institutes, community-based organisations, or other non-governmental organisations. Having non-governmental members in the Task Force could be very helpful for strengthening private-public partnerships.

[18]Possible ways to address concerns about the size of the Task Force include: have two or more types of membership (*e.g.*, key members and collaborating members); or establish subgroups such as a management committee and a technical committee.

What are the key activities of the Task Force?

The Task Force is expected to meet on a regular basis throughout the CAPP Programme Project in order to champion the effort within their Country, and to carry out its responsibilities, which include:

- establishing the procedures and schedule for the CAPP Programme Project, identifying key milestones;
- engaging appropriate officials, experts, and other stakeholders in consultations about issues related to chemical accidents and what actions should be taken to improve prevention and preparedness;
- guiding the timely preparation of the Country Situation Report, involving the appropriate experts, setting the schedule, supplying information for the Report, and providing guidance and feedback (see Chapter 2(b) and Annex I);
- managing the development of the Roadmap, identifying the key authors, setting the schedule, and providing guidance and feedback (see Chapter 2(c) and Annex II);
- facilitating the organisation of Workshops and Training Sessions, in coordination with the Technical Support Partner. This includes help in developing each Workshop agenda and Training Session curriculum. Members of the Task Force should attend the Inception Workshop and the CAPP Launching Workshop, and should consider attending the Training Sessions;
- securing the resources needed for the Workshops, Training Sessions, and other CAPP Programme Project activities (including funding, experts, equipment, and materials); and
- ensuring the necessary institutional arrangements are in place to move forward in accordance with the Roadmap and supporting efforts to develop and implement an appropriate CAPP Programme.

The Task Force should be guided by a Terms of Reference (TOR) approved by its members. The purpose of the TOR is to describe the membership and role of the Task Force, specifying its activities and a timeframe. A Generic Template for a Task Force Terms of Reference is set out in Annex III.

d. Participants: Guidance

Participants are defined for purposes of this ISP as all who attend Workshops and/or Training Sessions organised as part of the CAPP Programme Project. This Part includes information related to who should be invited to training activities, what Participants will be expected to do before, during and after the training activities, and what materials will be prepared by others to support the Participants.

Who should participate in the Workshops and Training Sessions?

Identifying who should attend Workshops and Training Sessions is the responsibility of the Implementing Country (generally the Focal Point and/or the Task Force). These decisions should take into account who will likely be, or should be, involved in some aspect of the development and implementation of a CAPP Programme as well who has relevant background and experience.

For purposes of this ISP, Workshops are less technical and are intended for a broad audience, including senior decision-makers and policy personnel (as well as technical experts). The Inception Workshop is designed to brief Participants on: general issues related to chemical accident prevention and preparedness; the nature of hazards and risks in the Country; and the elements of a CAPP Programme. The CAPP Launching Workshop (at the end of the Project where a draft Roadmap is reviewed) serves to get support for further activities, and to identify steps for moving forward.

Training Sessions are designed to share insights with technical experts and decision-makers from relevant government bodies, as well as representatives from the private sector, who will have a role in the development or implementation of some aspect(s) of a CAPP Programme. The Training Sessions should improve the technical skills and understanding of Participants which should, in turn, aid them in carrying out their official responsibilities.

Text Box 6

GUIDANCE FOR TASK FORCE MEETINGS

Experience from the Pilot Projects has revealed certain "good practices" for successful Task Force meetings, recognising that each Implementing Country should develop its own procedures that are consistent with local customs.

All members of a Task Force should feel ownership of the Project and responsibility for its success. This implies that there should be transparency in Task Force activities, and that meetings are carried out in a consultative manner with an open exchange of ideas and, where possible, with consensus decision-making. It is also important that meeting documents be circulated well in advance so all members have sufficient time for review before decisions are made.

Each Task Force will need to decide how to choose its Chairman/woman, identifying someone responsible for ensuring that the Task Force carries out its identified activities. This can be done by, for example, an election or appointment process, rotating Chair for a set term, or Co-chairs with delineated responsibilities.

Each Task Force will need to consider how often it will meet. Figure (b) – the structure of a typical CAPP Programme Project – includes three boxes representing Task Force meetings to indicate the three different stages of the Task Force's activities: after the Inception Workshop; during the period when the Training Sessions are being organised; and before the CAPP Launching Workshop. It is expected that the Task Force will meet several times during each of these stages.

Guidance for the first series of Task Force Meetings

These Meetings should take place after the Inception Workshop, and before the Introductory Training Session in order to:

- review and agree on the Terms of Reference (TOR) of the Task Force (see Annex III for a generic template for the TOR). The Focal Point should ensure that a draft TOR is prepared and circulated in advance of the first Task Force Meeting;
- agree on the Task Force membership, consultations, and institutional status;
- decide how to involve non-governmental stakeholders in the CAPP Programme Project, including consultations on relevant issues;
- agree on the logistical arrangements and scheduling for the future Task Force meetings;
- discuss and approve the process for developing the Country Situation Report which involves agreeing on an outline (a generic template is in Annex I) and deciding on the responsibilities, process, and schedule for drafting the Report; and
- if an Introductory Training Session is planned, review the agenda and timing for the Session (generally in conjunction with the Technical Support Partner) to help ensure that the agenda is appropriate for the expected Participants and that the timing allows for Task Force members to attend.

Guidance for the second series of Task Force Meetings

These should take place after the Introductory Training Session and before the further Training Sessions in order to:

- review the draft Country Situation Report to correct, update, or elaborate the information (if possible, allowing some time after the relevant Task Force Meeting to consult with their colleagues and provide further input);
- discuss and approve the process for developing the Roadmap which involves agreeing on an outline (a generic template is in Annex II) and deciding on the responsibilities, process, and schedule for drafting the Roadmap;
- begin work on the "needs assessment" which is key to creating an appropriate Roadmap;
- review the draft curriculum for the Training Sessions so that they are appropriate in light of the expected Participants, as well as the Country's needs and objective; and
- facilitate arrangements for the Training Sessions, including scheduling and participation.

Guidance for the third series of Task Force Meetings

These Meetings should take place after the Training Sessions and before the CAPP Launching Workshop in order to:

- finalise the Country Situation Report;
- review the draft Roadmap, including the needs assessment. It is important that this be carefully considered since the final Roadmap (that should be approved after the CAPP Launching Workshop) is expected to guide the Country's efforts with respect to its CAPP Programme;
- consider the draft agenda for the CAPP Launching Workshop in light of the expected Participants and the contexts of the draft Roadmap; and
- facilitate arrangements for the CAPP Launching Workshop, including scheduling and participation.

The Task Force, or a successor consultative body, should continue to meet after the CAPP Launching Workshop to help guide the development, implementation, and review of the CAPP Programme.

Thus, when developing the invite list for the more technical Training Sessions, the Implementing Country should take account of the fact that these sessions aim to improve understanding of: key concepts (*e.g.*, hazard, risk, hazardous activities); the specific elements of a CAPP Programme (*e.g.*, hazard identification and risk assessment, safety reports, safety management systems, accident reporting, inspections, preparedness planning); and how to choose elements for a CAPP Programme that meet the needs of the Implementing Country. The Training Sessions will also contribute to the elaboration of the Country Situation Report and Roadmap.

The Implementing Country might choose to organise special sessions to facilitate the development of the Country Situation Report and/or the Roadmap. These would likely have limited participation, targeting key experts who have specific responsibilities related to the drafting of these important documents. The Technical Support Partner should be informed about these sessions and their outputs.[19]

Why Participate in Workshops and Training Sessions?

There are a number of reasons why individuals should take part in the training activities:

- Participants will improve their skills and gain an understanding of issues needed for the development and implementation of a CAPP Programme. The knowledge gained will serve to enhance Participants' value to their organisations, especially as many of the concepts presented are relevant not only to chemical accident prevention and preparedness, but also to chemical safety more generally and to other issues related to health and environmental protection.
- Participants will be in a better position to help their colleagues and communities and, potentially, other countries in the region with respect to addressing chemical risks.
- Since drafts of the Country Situation Report and Roadmap will be reviewed at the Workshops and Training Sessions, Participants will gain new insights about their Country. Thus, these training activities will provide the experts and decision-makers with information and skills that will be valuable when shaping future laws, policies, and programmes.
- The Workshops and Training Sessions provide an opportunity for Participants to network with others in their Country, getting to know their counterparts at other agencies and improving communication and relations between public and private sector groups.

What is expected from Participants (before, during and after Workshops and Training Sessions)?

First and foremost, Participants should come prepared, having reviewed any materials circulated in advance. A description of the contents of a typical Participants' Handbook, to be provided in preparation for a training activity, is included in Text Box 8.

The Workshops and Training Sessions are intended to be interactive and, therefore, all Participants should be willing to share information, ask questions, take part in exercises, and actively engage in discussion sessions.

Text Box 7

PARTICIPANT QUALIFICATIONS

The Pilot Projects have provided the following insights on what qualities should be considered in developing the invitation list for the Workshops and Training Sessions:

- It is important that Participants be enthusiastic about the subject and be willing to learn, especially given the nature of the topics to be covered and the fact that these training activities tend to be packed with information.
- Participants need to understand that they have a responsibility to apply what they have learned in their official duties.
- It is also helpful for Participants to have some technical competence, as a consequence of their education or experience, in order to understand the concepts involved in chemical accident prevention and preparedness. However, they do not need to be experts in the field.
- It is valuable to invite individuals who are likely to remain in their agency/organisation/company for some period of time, and who are willing to share information with their colleagues who are not attending the training activities.
- Another consideration is the need for continuity. For example, it is preferable to have the same individuals available for all the Training Sessions, in order to avoid the need for repetition and to be able to build on what has been learned.

[19] In some cases, it may be relevant to invite the Technical Support Partner to the special sessions.

The following additional actions will generally be expected from all Participants in order for the training activities to be most effective:

- complete and submit a Background Information Questionnaire in advance of the training activities. A Generic Template for the Questionnaire is included in Annex IV;[20]
- collect relevant information about the work of their organisation related to chemical accident prevention and preparedness, if any;
- share with the Support Team and other participants any information that can be used in the further elaboration of the Country Situation Report or for the development of the Roadmap;
- complete any "homework" between and after the sessions;
- provide feedback to Instructors, to help improve future training activities. A Generic Template for a Feedback Form is included in Annex V;
- apply what they have learned during the training activities in their jobs; and
- make an effort, following the training activities, to share information about chemical accident prevention and preparedness with their colleagues and others, as appropriate.

Text Box 8

DESCRIPTION OF PARTICIPANTS' HANDBOOK

It is expected that the Technical Support Partner, in cooperation with the Implementing Country, will prepare a Participants' "Handbook" to be distributed in advance of the Workshops and Training Sessions.

The Handbook includes materials to support the objectives of the training activities such as:

- a Fact Sheet with background information on the Flexible Framework Initiative and *Flexible Framework Guidance*;
- a copy of the agenda for a Workshop, or curriculum for a Training Session;
- a reference sheet with key terms defined and acronyms explained;
- copies of the primary presentations, with space available for taking notes;
- copies of exercises;
- background information on the trainers;
- guidance for participants extracted from this ISP;
- a copy of the Feedback Form; and
- additional resource materials.

Given the amount of material that could be included in the Handbook, at least part of the information will likely be distributed electronically.

The responsibilities for translating (if needed), printing, and distributing the materials in the Handbook should be decided well in advance of the training activity.

[20]This Questionnaire should be prepared, and translated (where relevant), by the Technical Support Partner in conjunction with the Focal Point. It should be circulated to all Participants sufficiently in advance of the training activity so that the completed forms can be provided to the Instructors with enough time for them to adjust their presentations according to the background of the expected audience.

Chapter 4:
SUPPORT TEAM:
Guidance and Materials

This Chapter contains three Parts:

- Part a: providing an overview of the role of the Support Team;
- Part b: addressing the Technical Support Partner(s); and
- Part c: addressing the Instructors, *i.e.*, the individuals who will be presenting one or more modules, or facilitating discussions, during the Workshops and Training Sessions.

a. Role of a Support Team: Overview

This ISP describes a generic process; however, the activities of a Support Team should be guided by the needs, interests, and capabilities of the Implementing Country. Thus, it is important for all members of the Support Team to be flexible to respond to local facts and circumstances. Members of the Support Team should make an effort to learn about the Implementing Country, including its culture and the general context related to chemical accident prevention and preparedness, both from information provided by the Implementing Country and from independent research (*e.g.*, internet searches, consultations with experts, relevant UNEP documents).

Who are the members of the Support Team?

A "Support Team" consists of the Technical Support Partner (including any collaborating organisations) and all the Instructors involved in the training activities associated with a CAPP Programme Project:

- The Technical Support Partner assists the Implementing Country throughout the course of the CAPP Programme Project starting with the initial consultations, as described in part (b); and
- Instructors are brought in by the Technical Support Partner to help with Workshops and Training Sessions. As explained in part (c), Instructors are experts in subjects related to chemical accident prevention and preparedness who have agreed to share their insights and experience as trainers or facilitators.

What are key factors in planning training activities?

The Support Team will work together with the Implementing Country to create Workshop agendas and Training Session curriculums that take into account the local conditions as well as the background/experience of Participants. In developing an agenda or curriculum, the challenge is to:

- find the right balance between covering all relevant issues in the limited time available, while not being too general or simplistic, and not overloading the Participants with too much information;
- have presentations that resonate with the Participants because they can see the relevance to their situation, taking into account the nature of the industry and chemical risks in the Country;
- provide information that is practical, rather than theoretical, so that it will help the Participants move forward with their respective responsibilities in connection with the development and/or implementation of a CAPP Programme; and
- adjust planned activities in response to unexpected circumstances (which could occur before or during a training activity). For example, during the Pilot Projects, changes had to be made to the curriculum of the Training Session due to the fact that the level of expertise was different (higher or lower) than expected. Furthermore, direct feedback from Participants, or insights based on comments/questions posed by Participants, may indicate that the audience does not understand the information that is being presented or there may be a need to reinforce certain messages.

b. Technical Support Partners: Guidance

What is the role of the Technical Support Partners?

The Technical Support Partner is an organisation that provides assistance to an Implementing Country, pursuant to a request, specifically to work with the Country to use the *Flexible Framework Guidance* and this ISP throughout a CAPP Programme Project. If possible, a TSP should make itself available to provide guidance after the Project, when the Implementing Country is taking the steps outlined in the Roadmap to further develop and implement a CAPP Programme.

Who are Technical Support Partners?

UNEP has served as the Technical Support Partner for all the CAPP Programme Projects until the publication of this ISP, working with collaborating organisations. However, it is expected that in the future other organisations[21] will serve as TSPs.

A Technical Support Partner could be any organisation with the expertise and resources needed to provide assistance as described in this ISP, working alone or with collaborating organisation(s). In addition to UNEP, such organisations could include:

- another UN body such as one that has activities related to chemical accidents, or one that provides general institutional or training support;
- a regional or bilateral organisation, which could be intergovernmental or non-governmental;
- a government agency or institution from a country that has experience with the development and implementation of a CAPP Programme; or
- a non-governmental organisation such as an industry or professional association.

In most cases, the Technical Support Partner will be from outside the Implementing Country, although it is possible that a domestic organisation (such as an industry association or research institution) or a locally-based regional body could serve as a TSP.

ADPC has been working with the Government of Cambodia and the Philippines for past two decades, focusing on building capacity of governments at all levels to reduce impacts of natural hazards. This Flexible Framework Initiative provided ADPC with an opportunity to expand into the area of chemical accident preparedness; a very critical issue especially in the face of increasing vulnerability and exposure due to rapid economic development and urbanisation. As part of the CAPP Programme Project, ADPC worked with the countries to: develop a comprehensive understanding of each country's situation, dialoguing with the various interested partners; map the various initiatives already underway; and, through a process of consultation, identify priority actions for implementation. ADPC remains committed to providing relevant technical support to help the countries implement the priorities and strengthen the partnerships between national agencies traditionally involved in handling chemical accidents and natural hazards.

Mr. Arghya Sinha Roy
Asian Disaster Preparedness Center
Thailand

What are the key activities of Technical Support Partners?

A Technical Support Partner helps an Implementing Country by:

- Supporting the Focal Points and Task Force to ensure that they have the necessary structures in place to move forward with the CAPP Programme Project and to help with process issues including, for example: establishing goals; scheduling of activities; identifying possible sources of support; preparing agendas, curriculums, and other materials; and addressing key logistical and resource matters. In most cases, the Technical Support Partner will attend Task Force meetings.
- Identifying members of the Support Team (*i.e.*, collaborating organisations and Instructors) with the goal of creating a Team with complementary skills and backgrounds, including individuals who are effective in conveying complex or technical information in a way that can be understood by the audience (see Text Box 9 on engaging a team of Instructors). While not all Support Teams will include collaborating organisations, UNEP has found that they can be important to the success of a CAPP Programme Project. For example, local and regional organisations can bring special skills (such as language or technical experience), and/or insights into the local culture. The Instructors will generally include a combination of international and local experts.

[21] For example, the following organisations collaborated with UNEP: the MAHB – Major Accident Hazards Bureau of the European Commission (http://mahb.jrc.it) – for the CAPP Programme Projects in Cambodia, Philippines, Mali and Senegal; the ADPC – Asian Disaster Preparedness Center (www.adpc.net) – for the Projects in Cambodia and Philippines; and INERIS – Institut National de l'Environnement Industriel et des Risques (www.ineris.fr) – for the Projects in Mali and Senegal. Several independent experts were also involved in organising these Projects and serving as Instructors.

- Serving as the liaison between the Implementing Country and Instructors, facilitating information flows.
- Taking the lead in creating country-specific Workshops and Training Sessions, working with representatives of the Implementing Country to create the schedule and content for these activities.
  - » The Technical Support Partner will generally have the lead in preparing the agendas for the Workshops and the curriculum for the Training Sessions, working in collaboration with the Instructors. The Instructors will have the lead in preparing their individual presentations in coordination with others in the Support Team. Generic agendas and curriculums are set out in Annexes VI – VIII and additional examples will be made available on the web-portal. These can be used as a starting point, but will need to be adjusted in terms of both content and structure in light of the Country's goals, the local culture, legal/regulatory context, the time and resources available, and the background of the Participants.

    Depending on the maturity of the CAPP Programme in the Country and the level of expertise of the Participants, it may be useful to organise smaller training activities on particular CAPP elements for a subset of the Participants who have specific responsibilities related to the more technical or specialised elements (such as risk assessment or inspections). For instance, where a system of inspections is already in place, it may be valuable to provide training in deepening technical skills for those individuals likely to be involved in inspections related to the CAPP Programme.
  - » The Technical Support Partner works with the Instructors with the goal of having a good mix of training tools during each training activity. Thus, in addition to presentations by experts, training activities should include discussion groups, hands-on exercises, video presentations, and/or industrial site visits.[22] Such a variety will help to reinforce key ideas and keep the Participants' attention. This is particularly important for the Training Sessions, where the content is more technical than the Workshops.

    Experience from the Pilot Projects underscored the importance of including a wide variety of training activities to help keep Participants engaged, highlight key points, and allow different topics to be presented in the most appropriate manner. In fact, it is recommended that at least some modules of Training Sessions be presented entirely through group exercises or other interactive method.
- Providing support in preparation of the Country Situation Report and Roadmap by, for example, being available to answer questions and giving feedback or technical reviews on drafts.
- Securing financial resources needed to pay for expenses. The Technical Support Partner will need to agree with each Implementing Country on who is responsible for costs such as: travel expenses for members of the Support Team; document preparation costs (translation, printing, and shipping); expenses incurred in connection with the venues for the Workshops and Training Sessions; and, in some cases, contracts for experts and consultants.
- Providing guidance with respect to the logistical arrangements for the Workshops and Training Sessions. While the Implementing Country will generally have the lead in making the in-country arrangements, the TSP should provide advice, based on experience, concerning logistical arrangements (see Text Box 5).
- Assisting with preparation and distribution of materials to Participants and to Instructors, so that they are developed and circulated in a timely manner. For the Participants, it is important that the materials (including the *Flexible Framework Guidance* and presentations) be in a language that they can understand. Instructors should receive background information about the Country and the Participants sufficiently in advance so that presentations can be adapted to local circumstances and be completed at least a month in advance to allow for translation, compilation, and distribution.

See also Text Box 10 for a checklist of TSP Activities.

While the role of the Technical Support Partner, with respect to the CAPP Programme Project, formally ends after the conclusion of the CAPP Launching Workshop, the TSP (and other members of the Support Team) should make themselves available as a source of information and guidance as the Implementing Country moves forward with the development and implementation of its CAPP Programme.

[22]The industrial site visits should be organised jointly with the Focal Point.

Text Box 9

ENGAGING INSTRUCTORS FOR CAPP PROGRAMME PROJECTS

The Technical Support Partner is tasked with creating the Support Team, including qualified trainers and facilitators for the Workshops and Training Sessions.

Ideally, a number of qualified Instructors would be available for each Workshop and Training Session, allowing the TSP to create a team that meets the objectives and training needs identified in consultations with the Implementing Country. However, in many – if not most – cases, there are only a limited number of Instructors who can participate during any particular time period and there are cost-related limitations on the number of Instructors that can be present at any particular Workshop or Training Session. Thus, it is likely that each member of a Support Team will be called on to undertake multiple tasks.

With this caveat, the TSP should do their best to put together an effective team. This involves the following considerations:

- identifying the technical and presentational/pedagogical skills needed by Instructors for each part of a Workshop or Training Session. It is important to take into account which parts address technical subjects, such as hazard identification and risk assessment, requiring Instructors with specific background and experience;
- trying to include Instructors with complementary skills and backgrounds for each training activity. In this regard, it is ideal to include a mix of good trainers (to present information) and good facilitators (to lead discussions);
- taking into account the language skills of the Instructors, with a preference for those who can communicate in the language of the audience (or, where this is not possible, providing technically competent interpreters);
- involving local experts who are knowledgeable about the Implementing Country's culture and industrial hazards/risks. This may include experts from industry, academia and/or non-profit organisations, as well as government officials;
- including, to the extent possible, experts from the region and/or from countries that have a similar experience as the Implementing Country; and
- maintaining continuity, to the extent possible, in the membership of the Support Team for the various training activities in any Implementing Country.

Technical Support Partners should consider whether any Participants from the Workshops or Training Sessions have sufficient knowledge and the skills to serve as Instructors in future training activities either within the Implementing Country or in another country in the region.

Text Box 10

TECHNICAL SUPPORT PARTNER ACTIVITIES: CHECKLIST

This checklist identifies some of the key Technical Support Partner activities at the various stages of the CAPP Programme Project, based on experience to date. It is not intended to be comprehensive, and will need to be considered in light of local circumstances. *Updates of this list will be made available periodically on the web-portal.*

At the start of the CAPP Programme Project

- ✓ Get familiarised with the industrial, social, and cultural context of the Implementing Country
- ✓ Try to identify any major chemical accidents that have occurred within the Country
- ✓ Make sure to understand the principles and process described in the *Flexible Framework Guidance*
- ✓ Consider how TSP experience relates to the process described in the *Guidance*, and how the experience can be adapted for the Implementing Country
- ✓ Arrange a kick-off meeting with the Focal Point and other representatives of the Implementing Country or, if an in-person meeting is not possible, a conference call should be scheduled
- ✓ Contact the UN country office (UNDP) when initiating a Project and inform any other relevant UN agencies in the country (such as UNIDO, ILO, WHO, FAO) as well as UNEP DTIE and the relevant UNEP Regional Office. All local offices of UN agencies should be invited to the Inception Workshop
- ✓ Comply with any local requirements or customs related to international assistance activities. Check with the Focal Point or the UN country office about what these might be
- ✓ Support the translation and adaptation of key Project materials including the *Flexible Framework Guidance*, or ensure that they are translated and printed by the Implementing Country, where relevant
- ✓ Liaise with the Focal Point to arrange a start-up, or scoping, meeting with representatives of the Implementing Country
- ✓ Share the relevant parts of the Implementation Support Package with the Implementing Country
- ✓ Identify members of the Support Team, including collaborating organisations and Instructors, and agree on contractual and travel arrangements

In Preparation for any Workshop or Training Session

- ✓ Liaise with the Focal Point to schedule any Workshop or Training Session and develop an agenda/a curriculum, and invite relevant speakers
- ✓ Arrange a meeting/conference call (as appropriate) with the Focal Point and Instructors to ensure a common understanding of the Project including its objectives and timeline. This meeting will be a good opportunity to ensure that the presentations are well-coordinated
- ✓ Ensure that invitations are sent to all relevant stakeholders, including potential members of the Task Force
- ✓ Collect the presentations from all Instructors and send them to the Focal Point for translation/printing/electronic distribution, preferably a month in advance of the event
- ✓ Prepare opening and closing remarks that clearly describe the value of the Project. The remarks should take account of experience gathered from previous CAPP Programme Projects, as appropriate
- ✓ Make sure that information (relevant reports, training materials, invitations) is prepared and circulated in a timely manner (to Instructors, Focal Point, Participants)
- ✓ Facilitate travel and other logistical arrangements for Instructors, as appropriate
- ✓ Consult with the Focal Point concerning the selection of Participants for the Workshop or Training Session
- ✓ Communicate with the Focal Point with respect to the venue of the Workshop or Training Session to ensure that the facilities are suitable
- ✓ Request Instructors to prepare/adapt training materials and collect PowerPoint presentations and other materials (exercises, quizzes), preferably a month in advance
- ✓ Prepare Participants' Handbook. Send to the Implementing Country for translation and printing/distribution
- ✓ Agree with Focal Point whether the Training Session will include an industrial site visit and, if so, choose a site and facilitate the arrangements

A week or so before any Workshop or Training Session

- ✓ Confirm industrial site visit, if relevant, and ensure logistical arrangements have been taken care of and appropriate Personal Protective Equipment is available
- ✓ Confirm the Workshop or Training Session venue, ensuring that there are appropriate facilities and equipment (projector, computer, power supply etc.)

Text Box 10 *(continued)*

- ✓ Check with all the Instructors to ensure that they are prepared and confirm all travel and accommodation arrangements
- ✓ Request an approximate Participants List from the Focal Point and provide this List to Instructors
- ✓ Confirm that the interpreters have received the relevant materials

A day before any Workshop or Training Session

- ✓ Arrive early to allow time to check the venue and its facilities and to meet with the Focal Point and Instructors to underline the objectives and expected outcomes of the CAPP Programme Project and of the Workshop or Training Session
- ✓ If relevant, meet with the host of the industrial site visit (in order to explain the purpose of the training activity and visit)
- ✓ Test the equipment and materials to be sure that any slide and/or video presentations will work as planned
- ✓ Ensure that any additional materials for the Participants have been printed and distributed or, as appropriate, are available for distribution
- ✓ Obtain an updated Participants List, if possible
- ✓ Recap the role of each of the Instructors, the Focal Point, and the TSP during the Workshop or Training Session

During any Workshop or Training Session

- ✓ Respect the schedule, enforcing the allocation of time for presentations by Instructors and for questions by Participants, as appropriate
- ✓ Try to verify the quality of interpretation, together with the Focal Point, if relevant
- ✓ Meet with the Support Team daily to assess how well the Workshop or Training Session is going and adjust, as appropriate
- ✓ Collect feedback from the Participants and provide the feedback to the Focal Point. The Technical Support Partner is encouraged to provide this feedback to UNEP as well. An example of a Feedback Form is available in Annex V of this ISP

In preparation for Project Closure/CAPP Launching Workshop

- ✓ Ensure that agreed activities have been completed and that the Country Situation Report and Roadmap have been finalised to the extent appropriate
- ✓ Inform UNEP-DTIE and the appropriate UNEP Regional Office/UN country office of the Project outcomes, indicating the plans for moving forward with the further development of a CAPP Programme in the Country and describing the network of Project partners established for this effort
- ✓ Plan for the CAPP Launching Workshop to mark Project closure and the beginning of the Implementation Phase
- ✓ Prepare an agenda for the CAPP Launching Workshop together with the Focal Point and circulate it to the Task Force
- ✓ Agree with the Implementing Country with respect to responsibilities for presenting the completed Project and the strategies for moving forward with CAPP Programme implementation activities (*e.g.*, funding, technical support, etc.)
- ✓ Ensure that the presentations and other relevant materials (Country Situation Report and Roadmap) are collected and sent for translation, if needed, and printing/distribution a month before the Launching Workshop
- ✓ Confirm that the Task Force, relevant UN agencies in the Country, and other relevant national and regional stakeholders are invited to the CAPP Launching Workshop
- ✓ Prepare for collecting feedback on the overall Project to be sent to UNEP with a view to developing a case study that can be shared via the web-portal

c. Instructors: Guidance

What is the role of the Instructors?

Instructors are responsible for preparing and delivering presentations and for leading discussions and exercises. To help Instructors with their preparations, the ISP web-portal will include generic presentations, exercises, and related materials. It is important that the Instructors adapt and supplement the generic materials in light of their own experience and the Country's circumstances.

> *As a trainer within the Flexible Framework Initiative, there is a unique opportunity to pass on knowledge and at the same time enable participants to make a positive contribution to furthering the well-being of their country and making it a safer place in the future. Only through working together can a suitable solution for the country be found. Trainers cannot provide pre-packaged solutions, but they can help in developing the skills needed to build a sustainable process which fits the local needs.*
>
> **Mr. Mark Hailwood**
> Independent Expert
> Germany

A challenge for Instructors is to convey information that may be technical and complicated to an audience that will likely have varying levels of experience/education. It is also important for Instructors to recognise that there will be a considerable amount of information presented during the course of a Workshop or Training Session and the Participants might be listening to the presentation in a language that is not their mother tongue.

Who should be part of the team of Instructors?

A Technical Support Partner invites potential Instructors to participate in a CAPP Programme Project in light of their expertise and experience related to chemical accident prevention or preparedness. The goal is to bring together team of Instructors with complementary skills and backgrounds, including qualified trainers (to present information) and facilitators (to lead discussions) (see Text Box 9 on Engaging Instructors).

It is very helpful for Instructors to be enthusiastic about sharing their experience and knowledge. It is also important for the Instructors to be patient and flexible, since the audience will likely be comprised of individuals with very different backgrounds and levels of technical skills. Furthermore, in many cases, it is necessary to adapt to unforeseen circumstances during the course of training activities.

While it is preferable to have the same Instructors for all training activities associated with a particular Implementing Country, this might not always be possible.

What are the key activities of the Instructors?

Instructors are responsible for presenting relevant information and/or leading discussions/exercises during a Workshop or Training Session. Instructors will generally be asked to be responsible for two or more sessions or modules at any training activity.

In order to be effective, Instructors should:

- Learn about the Implementing Country and the expected Participants in advance of the training activity, in order to be prepared and to adjust presentations to local circumstances. It is also important to conform to cultural norms and habits of the Implementing Country (for example, with respect to how to greet and address Participants and how to dress appropriately).

  Some background information about the Country and the Participants should be circulated to the members of the Support Team by the Technical Support Partner. This can be supplemented through internet searches and other public resources. The types of information that are relevant include: general insights on local culture; data on the local industry including the nature and types of industries and location of hazardous installations; any accidents that may have happened in the past;[23] and information on the legal environment such as any laws or policies related to chemical or worker safety or environmental protection. Any valuable insights should be shared with the other members of the Support Team.
- Make a concerted effort to create presentations (including slides/Powerpoints and other materials) that are well-organised, interesting, relevant to the intended audience, and focused on key points.

[23]For example, the French BARPI database (http://www.aria.developpement-durable.gouv.fr/recherche_accident.jsp) contains a database of 40,000 accidents that have occurred in France and abroad since 1992.

It is critical to tailor training materials (and project activities in general) to the Implementing Country's situation, making sure that the topics covered and examples given are relevant.[24] In this regard, the Instructors should consider:

» what is a suitable level of difficulty and detail, based on the experience and background of the Participants;

» how can the presentation be made most appropriate, taking into account the local industry and culture and including examples that are relevant to the Implementing Country; and

» how to engage the audience and maintain their interest through, for example, use of discussions, exercises, videos, and personal stories.

- Provide relevant materials to the Technical Support Partner in a timely manner, so they can be reviewed, translated (if appropriate), and distributed to Participants.
- Consider how to make the Workshop or Training Session as interesting as possible. In this regard, it is recommended that each Instructor:

» make opening remarks that include a personal introduction, inform the Participants of the purpose and expected outcomes of the module or session, and describe how the presentation relates to improved chemical accident prevention and preparedness;

» incorporate personal experiences in the presentations;

» encourage discussion and questions (both during and outside the formal sessions)[25] and try to get to know individual Participants;

» seek insights from Participants to gain greater understanding of the Country;

» assess continuously the level of understanding of the audience during the session and adapt accordingly. To gain immediate feedback, the Instructor can question the audience intermittently to see if the Participants have understood the presentation up to that point. In addition, exercises can test whether the Participants are able to apply the information that has been presented;

» be prepared to rework the agenda/curriculum or adapt presentations during the course of the Workshop or Training Session, as appropriate;

» prepare Participants for industrial site visits by, for example, providing background information and explaining how the visits tie in with the information presented during the session. During site visits, make sure to follow all safety precautions and wear personal protective equipment to demonstrate appropriate behaviour when visiting hazardous installations; and

» work with the Technical Support Partner to request feedback at the end of the session (see Annex V for a Template of a Feedback Form). This can be used for improving future training activities.

- Be aware of the difficulty of presenting information to an audience that may not have significant technical experience and may be working in a language that is not their mother tongue.

» speak slowly and avoid the use of slang, acronyms, or abbreviations unless they are explained;

» adapt the presentation to the audience which may require choosing simpler language and shorter sentences; and

» meet with translators in advance of the presentation, when appropriate, to make sure they understand key terms and concepts. Also, pay attention to the translators to try to assess whether they seem to be following the presentations.

- Assist the Technical Support Partner with preparations before and during the Workshops and Training Sessions. These activities should be collaborative efforts and the TSP will likely seek the advice of Instructors during the planning process. In addition, all the Instructors should meet with the TSP and the Focal Point each evening during the Workshops and Training Sessions to discuss how to adjust the planned activities to be most effective.

[24]The value of adapting the presentations to the particular Implementing Country was underscored during the Pilot Projects. The feedback indicated that when the Instructors did not have advance information related to the knowledge and experience of the Participants, the materials did not meet the needs of the audience (*e.g.*, some of the training materials were too technical or too basic for the audience).

[25]One key lesson from the Pilot Projects was the value of creating opportunities for Instructors and Participants to ask questions, discuss concerns, and clarify issues on an informal basis. For example, during coffee breaks and meals, the Instructors should make themselves available. This helps to create a positive, cooperative dynamic for the training activity. Participants in the early CAPP Programme Projects identified this interaction as something that should be further promoted in future Projects.

- Be adaptable to unexpected circumstances, such as: less (or more) time allocated for training activities; technical problems with computers, projectors or other equipment; or another Instructor having to cancel at the last minute.
- Provide opportunities for Participants to ask questions after the Workshops or Training Sessions. It is very helpful if Instructors can give out their e-mail addresses in the event that a Participant wants to request further information.

See also Text Box 11 for a Checklist on Instructor Activities related to Workshop and Training Sessions.

Text Box 11

INSTRUCTOR ACTIVITIES: CHECKLIST

The following checklist identifies the issues that each Instructor should consider at the various stages of the CAPP Programme Project, based on experience to date. It is not intended to be comprehensive, and will need to be considered in light of local circumstances. *Updates of this list will be made available periodically on the web-portal.*

When agreeing to become an Instructor

- ✓ Discuss with the Technical Support Partner the subjects to be addressed during the CAPP Programme Project training activity and agree on your role
- ✓ Discuss administrative and logistic factors with the TSP including, for example, financial coverage for travel, contractual issues, where relevant, and timing/availability for travel
- ✓ Check whether previous work has been carried out in the Country by your organisation
- ✓ Learn about the local industrial, administrative, and cultural context
- ✓ Check on any visa or other requirements related to travel to the Country
- ✓ Determine whether there is a need for vaccinations or other health-related action
- ✓ Review UNEP's *Flexible Framework Guidance*, to ensure that you understand the approach described and to consider how to use the *Guidance* in any presentations

In preparation for any Workshop or Training Session

- ✓ Participate in a conference call(s) with the Support Team convened by the Focal Point or the Technical Support Partner
- ✓ Prepare presentations and other training materials, taking into account local facts and circumstances, the agenda or curriculum, information provided by the Technical Support Partner, and your personal experience
- ✓ Provide the presentations to the Technical Support Partner in a timely manner for translation (where needed) and distribution
- ✓ Confirm travel and logistical arrangements with Technical Support Partner (and, where relevant, finalise own arrangements)

A week or so before any Workshop or Training Session

- ✓ Participate in a meeting or, where this is not possible, a conference call with the Technical Support Partner, the Focal Point, and other Instructors to discuss allocation of responsibilities during the training activity (including, as appropriate, any related site visits) and to ensure a common understanding of the objectives and expected outcomes
- ✓ Review your presentation in light of the meeting discussions
- ✓ Confirm that any equipment or materials you need for your presentation are available
- ✓ Review the Country Situation Report and other relevant information concerning the Implementing Country

A Day Before any Workshop or Training Session

- ✓ Arrive early to the Country, if possible, and meet with the Technical Support Partner (and, as appropriate, other members of the Support Team) to review the plans, to ensure that relevant materials have been printed for distribution, to check that any technology works appropriately (*e.g.*, for PowerPoint presentations, videos, internet-based resources), and to prepare for industrial site visit, where applicable
- ✓ Check to see whether the Technical Support Partner has the most recent version of your presentations and other materials, and they have been shared with the Focal Point and, where relevant, the interpreters

During any Workshop or Training Session

- ✓ Check regularly to determine whether the Participants understand the presentation or exercise
- ✓ Invite questions or comments, and encourage group discussions and work-based exercises
- ✓ Meet with the Support Team daily to assess how well the Workshop or Training Session is going and adjust, as appropriate

After any Workshop or Training Session

- ✓ Provide finalised presentations to the TSP and mention whether they can be published on the ISP web-portal
- ✓ Provide any feedback and recommendations to the TSP to help in future Workshops and Training Sessions
- ✓ Indicate willingness to participate in similar Workshops/Training Sessions in the future, if applicable
- ✓ Recommend other experts that might be interested in getting involved in CAPP Programme Projects

Chapter 5:
POTENTIAL PARTNERS and FUNDERS:
Promoting the Flexible Framework Initiative and Increasing Support for Implementing Countries

This Chapter is directed to any organisation, enterprise, or individual that has an interest in supporting improved chemical accident prevention and preparedness. This could include: individual countries (*e.g.*, through their environment or industry ministries or aid agencies); international organisations (including regional and bilateral organisations);[26] multilateral finance institutions; industrial or professional associations; single enterprises; research institutes; and independent experts.

The Chapter contains five parts:

- Part a: describing the Initiative and why it was developed;
- Part b: explaining why others should support the Initiative;
- Part c: indicating what type of support is needed;
- Part d: specifying which types of organisations should consider helping countries to improve accident prevention and preparedness; and
- Part e: explaining how to get further information.

a. What is the UNEP Flexible Framework Initiative?

UNEP established the Flexible Framework Initiative in 2007 in order to support any country that wishes to review and, as appropriate, improve its programmes or policies related to prevention of, and preparedness for, accidents at hazardous installations.[27]

Hazardous installations are located in virtually every country, even where there is no substantial chemical or petrochemical industry. Chemical accidents occur throughout the world each year causing harm to workers and the public, damaging the environment, and adversely impacting the local economy (see Text Box 12 for an overview of hazardous installations and examples of industrial accidents involving chemicals).

[26]This includes the Participating Organisations of the Inter-Organization Programme for the Sound Management of Chemicals (IOMC) – FAO, ILO, UNDP, UNEP, UNIDO, UNITAR, WHO, World Bank, and OECD – as well as other international and regional UN bodies engaged in related activities (such as the UNECE and OCHA), development banks (such as the Asian Development Bank), and regional organisations (such as the Association of Southeast Asian Nations and the Economic Community of West African States).

[27]*Hazardous installations* are defined, for purposes of this document, as fixed industrial plants/sites at which "hazardous substances are produced, processed, handled, stored, used, or disposed of in such a form and quantity that there is a risk of an accident involving hazardous substance(s) that could cause serious harm to human health or damage to the environment, including property." Thus, hazardous installations include not just manufacturing facilities but also warehouses (*e.g.*, for pesticides or for chlorine used for water purification), refineries, mining operations, refrigeration facilities, waste dump and treatment facilities, and ports and other transport interfaces.

Specifically, the purposes of the Initiative are to:

- increase countries' understanding of issues related to chemical accident prevention and preparedness (CAPP);
- help countries identify the nature and location of their chemical accident risks/hazards, and understand whether there are sufficient protection measures in place to reduce the likelihood of a chemical spill, fire, or explosion and to minimise harm should an accident occur;
- improve the capacity of relevant institutions, agencies, and experts to address the risks of chemical accidents; and
- help countries develop and implement appropriate CAPP Programmes, designed to meet their needs and capabilities.

The Initiative is part of UNEP's work pursuant to the Strategic Approach to International Chemicals Management (SAICM) Global Plan of Action (GPA), which calls for the development of collaborative practically-oriented tools for chemical accident prevention.[28]

This is one element of UNEP's ongoing activities to build capacities for environmentally sound production and use of chemicals. It is intended to complement related UNEP's activities,[29] as well as other relevant international activities and instruments such as those of the International Labour Organization (ILO), World Health Organization (WHO), UN Economic Commission for Europe (UNECE), and the Organisation for Economic Cooperation and Development (OECD).[30]

The Flexible Framework Initiative currently consists of two primary components:

- ***the development of guidance materials including the* Flexible Framework Guidance for Addressing Chemical Accident Prevention and Preparedness (Flexible Framework Guidance) *published in 2010[31] and this Implementation Support Package (ISP) including the related web-portal; and***
- ***the implementation of in-country activities ("CAPP Programme Projects"), consisting of support to individual countries (called "Implementing Countries"), in connection with their efforts to improve chemical accident prevention and preparedness using the* Flexible Framework Guidance.**

Guidance Materials

The *Flexible Framework Guidance* offers practical information that can be used by any country to understand what actions would be appropriate to improve accident prevention and preparedness, taking into account local conditions such as: the level and nature of risks; national priorities; available resources; and the legal and cultural context.

Specifically, the *Flexible Framework Guidance* describes the steps that are needed before developing and implementing laws, regulations, policies, guidance, or other instruments for an effective CAPP Programme. It then sets out possible elements of such instruments and provides resource materials related to how the elements may be implemented.

[28]The text of the SAICM Global Plan of Action (GPA) may be found at: www.saicm.org.

[29]These include:
- The APELL Programme (**A**wareness and **P**reparedness for **E**mergencies at **L**ocal **L**evel) which was launched in 1986, as a response to industrial accidents that had occurred in both developed and developing countries. The APELL Programme was designed to improve local level emergency preparedness through a community-oriented effort, bringing together industries, local authorities, and community members.
- The Responsible Production Approach, which is targeted at improving chemical safety within SMEs and along the value chain, by engaging businesses, distributors, traders, buyers, and others in the supply chain in safer production, accident prevention, and emergency preparedness.
- Activities of UNEP's Chemicals Branch, those that aim to protect human health and the environment from adverse effects caused by chemicals throughout their lifecycle.
- Activities of the joint UNEP/OCHA Environment Unit, which mobilises and coordinates emergency assistance and response resources to countries facing environmental emergencies and natural disasters with significant environmental impacts.

[30]For further information about these activities, see Annexes V and VI of the *Flexible Framework Guidance*.

[31]The *Flexible Framework for Addressing Chemical Accident Prevention and Preparedness: A Guidance Document* (referred to in this document as the *Flexible Framework Guidance*) 2010 (ISBN:978-92-807-3094-4) can be downloaded at: http://www.unep.fr/scp/sp/saferprod/initiatives.htm.

Thus, by using the *Flexible Framework Guidance*, a country can design its own CAPP Programme to meet its specific circumstances and needs. With its modular approach, the *Guidance* provides a way forward for countries to start making improvements to accident prevention and preparedness with a limited programme, expanding their efforts as experience and resources allow.

The *Flexible Framework Guidance* is based on the experience of many countries, in particular members of the European Union and the United States, as well as on international agreements in this area[32] and other international guidance.[33]

This ISP, building on the experience of the first CAPP Programme Projects, provides guidance to both Implementing Countries as well as to the organisations and experts that are providing assistance to these Countries. The ISP collects in one package general guidance as well as generic training materials and tools that can be adapted for use in connection with any in-country implementation and capacity-building Projects.

By capturing the lessons learned as part of the Flexible Framework Initiative, the ISP helps to reduce duplication of effort and also makes it easier, and less costly, for any organisation to support an Implementing Country. Since the ISP consists of a peer-reviewed set of materials, it should also help ensure that the organisers of training activities have useful materials, that the materials will reflect good practice, and that they will be appropriate companions to the *Flexible Framework Guidance*.

The ISP, which is available in hard copy and on-line as a PDF document, is supplemented by a web-portal containing training materials and case studies. The web-portal will be periodically updated in order to continue to share experience.

CAPP Programme Projects

Through the CAPP Programme Projects, UNEP works directly with individual countries to improve their capacity to address the issue of chemical accidents. These Projects began in 2009 with two countries – Cambodia and the Philippines. Based on the experience with these Pilot Projects, a process was developed to guide future in-country activities, as described in this ISP. This process involves: engaging all relevant stakeholders; identifying key issues such as the extent and nature of the hazardous installations in the country; analysing existing regulations/policies and gaps in control measures; providing training and related assistance; undertaking a needs assessment; and establishing a "roadmap" for the development and implementation of a CAPP Programme tailored to a country.

UNEP is continuing to support countries that request assistance to the extent resources are available. As part of these country-level Projects, UNEP brings together a team of international experts and organisations to assist with training activities and other capacity-building support.

In light of the number of countries requesting assistance, UNEP is seeking additional support to sustain and expand the country-specific training and assistance activities (see Text Box 13 for benefits of getting involved in the Flexible Framework Initiative).

This support can take the form of financial contributions and/or experts to allow UNEP to continue its involvement with CAPP Programme Projects.

Another possibility, which would have greater impact, is having others (organisations, countries, companies, etc.) taking the lead in assisting countries, without the direct involvement of UNEP. It is hoped that this ISP will encourage others to lead CAPP Programme Projects, such as international, regional, and bilateral organisations (including IOMC Participating Organizations and other UN bodies) as well as countries and industrial/professional associations with experience in addressing chemical accident prevention and preparedness.

[32]In particular, the ILO Convention 174 concerning the Prevention of Major Industrial Accidents (http://www.ilo.org/ilolex/english/convdisp1.htm) and the UN/ECE Convention on the Transboundary Effects of Industrial Accidents (http://www.unece.org/env/teia/welcome.html)

[33]These include materials prepared by UNEP as part of its APELL Programme, WHO as part of its work on environmental health in emergencies (http://www.who.int/environmental_health_emergencies/en/index.html), and the OECD, such as the *Guiding Principles for Chemical Accident Prevention, Preparedness and Response* (www.oecd.org/ehs).

Text Box 12

CHEMICAL ACCIDENTS: OVERVIEW AND EXAMPLES

There have been a number of widely-publicised accidents, often known simply by the name of the community where they occurred, such as Seveso, Bhopal, Basel, Baia Mare, and Buncefield. But most chemical accidents do not make international headlines; there have been many lesser-known accidents in countries worldwide, with significant adverse health, environmental and/or economic impacts.

Developing countries are often at greater risk of adverse effects from chemical accidents because of limited regulations or incomplete enforcement of existing rules, inadequate resources for prevention, preparedness and response, and fewer staff in government and industry with technical training. Furthermore, without strict land-use planning rules, industrial facilities act as a magnet for housing and other developments and, therefore (as with Bhopal), there are often homes, schools, shopping districts, and transport facilities close to the boundaries of hazardous installations.

Virtually all countries have facilities with the potential for significant chemical accidents (*i.e.*, fixed installations where hazardous chemicals are produced, used, stored, or otherwise handled). Some hazardous installations may be obvious, such as a refinery or large manufacturing facility. But significant chemical accidents can also occur at places which may not appear to pose a risk such as a refrigeration facility, a grain silo, mining operations, hazardous waste sites, or warehouses that intermittently hold pesticides or other hazardous chemicals.

Chemical accidents can have devastating impacts on human health and the environment. For example, acute exposure to harmful chemicals can cause direct, immediate harm to workers and others in the vicinity or can cause longer-term health consequences including chronic diseases and cancer. People can also suffer harm from indirect contact through their diet as the result of contaminated drinking water, agricultural products, fish, or livestock. The release of hazardous substances can kill animals and vegetation, poison water supplies used for drinking, fishing, and irrigation, and render soil unfit for agriculture. There have also been many examples of transboundary environmental impacts, especially when accidents occur near international waterways or close to borders.

Such accidents can also have significant and lasting economic consequences for the community near the accident, affecting not only to the enterprise where the accident occurred but also to neighbouring enterprises and others along the economic chain. For example, an accident may pollute local waterways increasing the costs of water used by facilities for industrial processes and causing significant damage to fishing and farming industries in the area or downstream.

While it is difficult to calculate the costs and benefits of implementing a chemical accidents programme, there is convincing evidence that accident prevention and preparedness is a wise investment, with the costs involved in improving safety being less than the cost of accidents. There are also collateral economic benefits to instituting CAPP programmes. For example, such programmes often lead to improved efficiency and lower production costs, as well as to better overall health, safety, and environmental performance of enterprises. Safe operations also protect the good will and reputation of industry and public authorities, as well as foster improved relationships among different government bodies and between government and industry, as well as between industry and members of the community.

The following summarises information about some major accidents. A longer list of accidents, as well as related information on activities of concern and processes that can lead to loss of containment, is available in Tables I, II, and III of the *Flexible Framework Guidance*.

Place/Date	Description	Consequences
Mexico City (November 1984)	A 200mm pipe between a storage cylinder and sphere ruptured, releasing LPG and resulting in a large gas cloud which ignited, causing an explosion and many ground fires. The death toll was high because of the proximity of the plant to residential areas.	• 650 killed • 6,400 injured
Bhopal, India (December 1984)	A cloud of methyl isocyanate was released at a pesticide plant after water entered a storage tank. The inherently unsafe process design (storage of large amounts of toxic intermediate), poor site management, and close proximity of the local population were major contributors to this accident.	• > 3,000 killed • 170,000 injured
Jesse, Nigeria (October 1998)	A blast from a leaking pipeline which had been vandalised. Over 1,000 people had gathered to collect fuel to sell on the black market.	• > 700 dead • > 100 injured
Pakistan (May 1999)	A gasoline tanker carrying gasoline swerved to avoid cyclist and overturned. Gasoline spilt over a large area, near shops. Villagers were collecting spilt gasoline when it burst into flames, killing all nearby. A cigarette or burning match is thought to be responsible.	• > 60 killed • > 150 injured
Baia Mare, Romania (January 2000)	The collapse of a dam around a tailings pond of a precious metals recovery facility led to the release of ca. 100,000 cubic metres of liquid and ca. 50 to 100 tonnes of cyanide, as well as copper and other heavy metals, into the local river which led to the pollution of the Somes, Tisza, and Danube rivers. The spill was initiated by heavy rain and melting snows which led to the collapse. There was no emergency plan in place and the risks of rain or melt water were not considered beforehand.	• Interruption of water supplies along the river network • Pollution of ca. 2,000 km of river basin
Toulouse, France (September 2001)	An explosion in an ammonium nitrate and fertiliser factory destroyed the facility and caused widespread damage in the surrounding area. Poor management of land use planning contributed to the extent of the damage and the number of injuries.	• 29 killed • ca. 2,500 injured
Jilin, China (November 2005)	An explosion at a petrochemical plant resulted in the contamination of the Songhua River with an estimated 100 tonnes of benzene, aniline, and nitrobenzene. The plume of pollutants reached a length of over 150 km and moved very slowly along the frozen river. This resulted in transboundary pollution into the Russian Federation.	• 8 killed; 60 injured • 10,000 evacuated • Disruption of drinking water supply along the Songhua River
Mongolia (200 km north of Ulan Bator) (April 2007)	An accident occurred at an informal operation to process gold ore using mercury and sodium cyanide. Wastewater containing cyanide and mercury was poured directly to the waste treatment plant which overflowed and created a pond with a surface area of approximately 560 m^2. As a result, the drinking water well and water supplying system were polluted and the ground of the village was contaminated by mercury.	• > 200 injuries • > 44,000 square metres of soil contaminated with mercury and sodium cyanide • Ground water and drinking water supplies contaminated
Ajka, Hungary (October 2010)	A collapse of one of caustic waste reservoirs of the Ajkai Timföldgyár alumina plant resulted in a release of about a million cubic metres of alumina sludge, flooding several nearby localities, villages, and towns. The flood swept cars from roads and damaged bridges and houses, forcing the evacuation of hundreds of residents. The spill reached the Danube, prompting countries located further down the river (Slovakia, Croatia, Serbia, Romania, Bulgaria, and Ukraine) to develop emergency response plans.	• At least 9 killed • 122 injured • About 40 square kilometers of land affected

b. Why Support the Initiative?

Providing financial or technical support for the Flexible Framework Initiative is an effective and efficient way to help developing countries to improve chemical safety. The Initiative has been shown to be very practical, with the *Flexible Framework Guidance* and ISP providing effective and efficient mechanisms for transferring know-how and experience to any country wanting to improve chemical accident prevention and preparedness.

This Initiative has proven to lead to concrete results, and it is consistent with the dual objectives of improving health and safety while contributing to industrial competitiveness.

The *Flexible Framework Guidance* and the ISP allow in-country training and support activities to be undertaken at relatively low cost and effort, with confidence in using a proven approach. The *Guidance* is based on almost thirty years' experience by countries and international organisations in the development and implementation of CAPP Programmes. The ISP also builds on the experience of UNEP in helping individual countries use the *Guidance*. Furthermore, the lessons learned by each new Implementing Country will be incorporated into the collective experience for future activities.

Thus, providing financial or technical support to UNEP, in connection with the Initiative, represents a good opportunity for any organisation, enterprise, or individual interested in helping developing countries to improve chemical safety. The ISP should also inspire countries and organisations to take the lead in helping developing countries (*e.g.*, serving as a Technical Support Partner), knowing that they have available generic guidance and materials, which can be adapted for any Implementing Country, and that they can seek the advice of UNEP in using the ISP.

UNEP encourages anyone to take full advantage of the *Flexible Framework Guidance* and ISP, which can be reprinted, excerpted, translated and/or posted on a website.[34]

See Text Box 13, which summarises the benefits to any organisation or individual that helps to expand the reach of the Initiative.

The Joint Research Centre/the Major Accident Hazards Bureau (JRC-MAHB) of the European Commission has been actively involved in all aspects of the Flexible Framework Initiative.

Ms. Maureen Wood (Head, JRC-MAHB) stated that the JRC-MAHB sees many advantages in working with various partners through the Initiative:

First, JRC's participation in the Flexible Framework Initiative supports the EU's policy on disaster risk reduction worldwide. Second, involvement enhances the potential of JRC's scientific work in the following ways:

- *opens up opportunities to exchange information for improving institutions and tools to support major accident prevention;*
- *provides additional insights into economic, organisational, and cultural influences on risk and risk management;*
- *gives an avenue for future collaboration on the numerous areas of mutual interest (accident data and analysis, communication issues); and*
- *allows broader exchange of good practice and lessons learned from accidents.*

[34]UNEP would like to be informed of any such translations or publications, and of any Projects that are using the *Flexible Framework Guidance* or materials from the ISP. UNEP may wish to put any relevant materials, information, or feedback on the ISP web-portal.

Text Box 13

BENEFITS OF SUPPORTING THE FLEXIBLE FRAMEWORK INITIATIVE

For any organisation, agency, association, country, or individual, becoming part of the network of experts involved with the Flexible Framework Initiative can provide a number of direct and indirect benefits:

- gaining visibility through identification with the Initiative;
- leveraging resources for greater impact, especially for those organisations with on-going activities related to accident prevention and preparedness;
- honing skills and gaining experience, by working with different experts and working in different countries;
- learning from the experience of others in the network, sharing best practices and gaining access to a wider variety of data sources;
- increasing opportunities for future collaborations;
- supporting efforts to improve sustainable development and improved regulations in related areas (such as disaster reduction and overall chemical safety);
- increasing attractiveness of the Implementing Country for foreign investment; and
- improving communication among stakeholders (including government officials, industry, and community representatives).

For IOMC Participating Organizations, there are additional benefits including:

- furthering the intent of the Strategic Approach to International Chemicals Management (SAICM) Global Plan of Action (GPA) and, in particular, the action point calling for the development of collaborative practically-oriented tools for chemical accident prevention; and
- supporting their own programmes related to chemical accident prevention and preparedness, and related issues such as overall chemical safety.

For aid or development agencies, the Initiative can also support:

- fulfilling their international commitments; and
- advancing their external relations policy (*e.g.*, by assisting countries that are on their target lists).

Private companies and industrial/professional associations may also benefit from:

- improving their public image, by becoming associated with improving standards in the countries in which they operate;
- enhancing relations and communications with regulatory agencies, communities, shareholders, and other stakeholders;
- having an opportunity to shape regulations in Implementing Countries and, in this regard, helping to harmonise the regulations with Responsible Care; and
- helping to pave the way for sustainable investments and further development.

In addition, national agencies within the Implementing Countries may find the Initiative beneficial by, for example, increasing their ability to leverage government funding.

c. What Type of Support is Needed?

There are many ways that organisations, public agencies, and individuals can support the Flexible Framework Initiative. These include, for example:

- contributing funds to UNEP earmarked for the Initiative. Additional resources would allow UNEP to continue, and possibly expand, its country-specific implementation activities;
- translating the *Flexible Framework Guidance* and ISP materials and, as appropriate, adapting them for local use;
- providing experts to be Instructors for training activities;
- helping to develop materials for training activities;
- serving as a Technical Support Partner, leading the effort to assist an Implementing Country. This can be done with or without the direct involvement of UNEP (in all cases, UNEP would like to be informed about such activities and would encourage feedback);

- developing and implementing "train the trainers" activities in order to expand the pool of experts who can support training activities and, in particular, to work with others in their region;
- lending experts to Implementing Countries to help with the preparation of Country Situation Reports or Roadmaps; and/or
- promoting the *Flexible Framework Guidance* and the ISP (*e.g.*, by posting on websites and discussing them in relevant conferences/meetings) and using these materials to the extent appropriate. The *Guidance* and the ISP can be made available on DVDs or as PDF documents to facilitate their distribution and use.

UNEP is also open to other suggestions related to how to make best use of the *Flexible Framework Guidance* and the ISP and how to support any country that wishes to improve chemical accident prevention and preparedness.

Any organisation or individual interested in learning more about supporting the Initiative can contact UNEP at capp@unep.org.

d. Which Organisations Should Consider Supporting Countries' CAPP Programme Development?

Any donor country, development agency, international organisation (including regional or bilateral organisations), industrial/professional association, enterprise, institute, non-profit/philanthropic organisation, or individual with an interest in issues related to chemical accident prevention or preparedness, or which has funds that can be used to aid countries in addressing issues related to chemical safety, should consider supporting this Initiative.

Thus far, a number of countries have contributed funding to the Initiative, through relevant agencies and ministries. In addition, technical support has been provided by countries, international and regional organisations, non-governmental organisations (including industry associations, research institutes, and non-profits), and independent experts. See Text Box 14 for examples of existing and past partnerships related to the Flexible Framework Initiative.[35]

The following are just some examples of potential partners and funders, and the types of contributions (financing or expertise) that would be welcome:

- Countries can provide funds and/or technical support. Financial contributions can be made either to UNEP earmarked for the Initiative or can be donated directly to an Implementing Country(ies) to help defray the costs of training or related activities. Countries can also share technical expertise by, for example, taking the lead – as a Technical Support Partner – in organising activities (perhaps twinning with a country or a region where they have a history of aid activities). Another possibility is assigning individuals who have the experience to serve as Instructors, to help with the development of training materials and/or to assist with the preparation of a Country Situation Report and Roadmap.
- IOMC Participating Organizations can either support UNEP's efforts or can directly facilitate the expanded use of the *Flexible Framework Guidance*.
  - » These Organizations might collaborate with UNEP on joint activities, or can provide experts for training activities. These Organizations might also be able to support UNEP by facilitating contacts with different ministries and other stakeholders in Implementing Countries.

[35]Additional Information on which countries and organisations have provided financial, technical, or in-kind support is available on the web-portal. This information will be updated periodically.

» A Participating Organization can help expand the number of Implementing Countries by serving as a Technical Support Partner, taking the lead in an individual country. Furthermore, since the *Flexible Framework Guidance* and the ISP are IOMC publications, it is hoped that the Participating Organizations will promote these documents and use them in their activities.

INERIS has an active policy for disseminating information on industrial risks to the wider public. In this context, the Flexible Framework Initiative provides a very good opportunity to reach out to and support their countries, to face new problems and to adapt one's knowledge and expertise to new cultures, challenges, and environment.

Mr. Franck Prats
Senior Technical Advisor – Risk Analysis
INERIS
France

- Other UN bodies and Intergovernmental Organisations (global, regional, and bilateral) can also support UNEP's efforts and/or facilitate the expanded use of the *Guidance*. Such organisations might serve as collaborating organisations helping UNEP coordinate country-specific activities, or can provide technical experts for UNEP-led activities. These organisations can also promote and use the *Flexible Framework Guidance* and the ISP as part of their activities related to chemical safety.
- Development Banks can provide financial support directly to Implementing Countries to help them develop the expertise needed to implement a CAPP Programme. They can also disseminate and promote the *Guidance* and the ISP to relevant organisations in their respective regions.
- Companies that employ chemists, engineers, safety specialists, or others with information and expertise related to the development and implementation of CAPP Programmes can provide Instructors for training activities. Companies, both local and international, in an Implementing Country should actively support the effort to create a CAPP Programme through participation in relevant meetings and by providing information and other support to help the Task Force in its work (including the development of a Country Situation Report and Roadmap). Companies might also provide some funding for local activities and welcome training participants for site visits.
- Industry and professional associations with a presence, or interest, in an Implementing Country or region, such as associations of chemical companies, engineers, chemists, or lawyers, can provide financial support, serve as Instructors, or help with the development of country-specific training materials. They can also work with the Task Force to help develop the Country Situation Report and/or the Roadmap.[36] Such associations can also facilitate communications among stakeholder groups.
- Universities and research institutes from within the region of an Implementing Country can provide Instructors (and possibly pay their related expenses) for training activities and might help the Task Force in its activities. Experts from universities and research institutes, in addition to having expertise, also bring an understanding of local issues and culture. In addition, universities and institutes can promote and use the *Flexible Framework Guidance* and ISP, as well as translate and/or adapt training materials.
- Non-profit organisations may be in a position to provide experts or training materials. Generally, such organisations are helpful in engaging communities and other stakeholder groups in Implementing Countries.
- Foundations or other philanthropic organisations might be able to support CAPP Programme Projects either by donating to UNEP or directly to Implementing Countries.

[36]Roadmaps, which are prepared by Implementing Countries towards the end of the CAPP Programme Project, identify a Country's objectives related to the development and implementation of a CAPP Programme and specify the path for meeting the objectives including specific steps to be taken in the short- and long-term.

Text Box 14

EXAMPLES OF UNEP'S EXISTING AND PAST PARTNERSHIPS RELATED TO THE SAFER PRODUCTION PROGRAMME

The following are examples of partnerships that UNEP has established with various organisations and individual countries to support and enhance the work under the Flexible Framework Initiative and other activities that are part of UNEP's Safer Production Programme:

Individual countries, including China, France, Norway, and the United States, have provided financial and in-kind contributions to the Safer Production Programme of UNEP through their agencies charged with environmental protection. For example, the United States Environmental Protection Agency (USEPA) has been providing expert support for the Initiative as well as earmarked funding to cover the services of experts to assist with the development of the *Flexible Framework Guidance* and the ISP. The Ministry of Sustainable Development of France (Ministère de l'Environnement, Développement Durable, Transports et Logement) has provided funding to support Projects in Mali, Senegal, and Sri Lanka, in the form of direct contributions that enabled technical support by the French Institute of Industrial Environment and Risks, INERIS (L'Institut National de l'Environnement Industriel et des Risques). Whereas the funding provided by some countries has been earmarked for particular Projects, Norway has been providing a set annual contribution to UNEP for allocation among different programmes with some funding going to the Safer Production Programme. China provided in-kind support by hosting activities including the 2011 global forum to commemorate the twenty-fifth anniversary of the APELL Programme.

Specialised national or regional agencies, such as the Major Accident Hazards Bureau (MAHB) of the Joint Research Centre (JRC) of the European Commission, the Swedish Civil Contingencies Agency (MSB), the Asian Disaster Preparedness Center (ADPC), and INERIS, partner with UNEP under the Flexible Framework Initiative and the APELL Programme by providing a wealth of expertise. These agencies have helped with the preparation of technical materials, provided support for the development of capacity-building activities, and made instructors available for workshops and training sessions.

Industry associations, including the International Council of Chemical Associations (ICCA) and the International Council on Mining and Metals (ICMM), have partnered with UNEP at various occasions, for example in the creation of UNEP's *Responsible Production: A Framework for Chemical Hazard Management for Small and Medium Sized Enterprises*. Industry associations have also been involved in implementing activities by, for example, funding and organising regional and national workshops and providing Instructors and training materials. Through a Memorandum of Understanding (MoU) with ICCA, UNEP receives experts and funding for capacity-building activities. The Brazilian Chemical Industry Association – ABIQUIM – has provided expertise to support the development of guidance materials and works to distribute UNEP's tools for implementing Responsible Production with 500 SMEs in Brazil.

Individual companies partner with UNEP on a regular basis by providing experts to speak at capacity-building events, by hosting site visits during training sessions, and by acting as pilot sites for testing new tools and guidelines developed by UNEP. For example, several chemicals and mining companies from Peru and Thailand joined UNEP in piloting the Responsible Production Approach. Furthermore, SMEs from Egypt, among other countries, partnered with UNEP to undertake a Project to implement risk reduction measures using the Responsible Production Approach at these companies. The Dow Chemical Company (Dow) provided funding and expertise for a two-year Project that was implemented in China with the Ministry of the Environmental Protection (MEP) in order to improve safety in the Yangtze River International Chemical Industry Park through an APELL process.

Universities and research institutes, such as the Thailand Environment Institute (Thailand) and Tsinghua University (China) are core partners of UNEP, providing technical support services for Project implementation and for translation of UNEP's guidance materials and toolkits into local languages. Furthermore, in 2011 UNEP and Renmin University of China signed a MoU to promote wider cooperation, research, and capacity building in the areas of environmental emergency management and chemical accident prevention and preparedness policy and regulation in China.

e. For Further Information

UNEP would encourage any organisation, association, enterprise, or individual with experience in chemical accident prevention and preparedness, or with funding available to support related activities, to consider working with UNEP to expand the Flexible Framework Initiative and to promote the *Flexible Framework Guidance* and the Implementation Support Package. As described above, UNEP supports the use, translation, publication, and distribution of these documents by anyone who is seeking to reduce chemical risks and improve countries' preparedness planning for accidents involving hazardous substances. The only request is that UNEP be informed when their documents are being used, distributed, etc.

If you or your organisation has an interest in UNEP activities related to chemical accident prevention and preparedness, or has questions concerning the Flexible Framework Initiative, please contact UNEP at capp@unep.org. Further information about the Initiative and related Projects can be found at http://www.unep.fr/scp/sp.

Annex I:
COUNTRY SITUATION REPORT:
Generic Template

As further described in Chapter 2(b), the Country Situation Report is critical to the success of a CAPP Programme Project. While the Country should not expend excessive amounts of time or resources to develop the Report, an effort should be made to collect relevant information that is easily available, and to present the information in a format that is simple to read and understand. Such a Report will help to create a common understanding of the facts and conditions and provide stakeholders with the insights required for a successful Project. It also provides a starting point for the preparation of the Roadmap leading to the development and implementation of an appropriate CAPP Programme.

Country Situation Report Suggested Table of Contents	
Part 1	**Background Information** *including demographic, economic, and administrative facts as well as maps*
Part 2	**Accident Potential and History** *including nature and extent of hazards/risks,* e.g.*, location of hazardous installations, chemicals of concern, and accident case history*
Part 3	**Government Infrastructure** *including a description of all relevant ministries, agencies, and other bodies involved with issues related to chemical accident prevention and preparedness*
Part 4	**Regulatory and Non-regulatory Context** *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*
Part 5	**Non-governmental Activities** *including activities of industry, labour, public interest groups, and research sector*
Part 6	**Community Awareness** *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*
Part 7	**Available Resources** *including experts, training, finances, equipment/technology, and data*
Part 8	**Other Relevant Information** *capturing any additional information the Country would like to include such as on-going and past Projects related to accident prevention and preparedness*
Part 9	**Conclusions**
	Glossary

Part 1 Background Information

This Part provides an introduction to the Country Situation Report, including a statement on the purpose and content of the Report. It should also include a brief summary of basic information about the Country including, for example, key demographic, economic, and administrative facts.

a. Description of the Country Situation Report

Noting that it provides an overview of key issues relevant to chemical accident prevention and preparedness, including: existing hazards and risks; the national legal and institutional framework; and relevant government and non-governmental activities.

b. Purpose of the Report

Indicating how it will be used in the CAPP Programme Project.

c. Resources used to Create Report

*Outlining the actual sources of information used to develop the Report (*e.g.*, databases, documents, interviews).*

d. National Demographic, Economic and Administrative Facts

Including summary information on:

- *population (including its distribution in the Country and literacy rates);*
- *official language(s);*
- *form of government and political structure;*
- *key economic sectors (industry, agriculture); and*
- *key health and environmental concerns.*

e. Map(s)

Country map(s) with the following information indicated (if available): industrial zones; mining areas; agricultural zones; port areas; population centres; and key transport routes (if applicable).

Part 2 Accident Potential and History (including nature and extent of hazards/risks)[37]

This Part identifies the nature and location of hazardous installations and hazardous substances in the Country, as well as summarises the history of past accidents. This should provide insights on the vulnerability of the Country to chemical accidents and the types of impacts that could result from such accidents.

Therefore, this Part should gather available information on:

- the hazardous chemicals that are used, transported, or handled in the Country based on, *e.g.*: manufacturing, export, and import records; industry licenses; transport records; reports from industrial organisations (see subpart 2(a));
- the location and nature of hazardous installations in the Country, including for example: manufacturing installations, packaging and processing plants, refineries, mining areas, storage and warehousing facilities, water and waste treatment facilities, and transport interfaces (see subpart 2(b));
- an overview of past accidents in the Country, which can be developed using national or local authorities' files, local databases, reports from fire and other emergency services, newspaper clippings, and/or anecdotal information as well as from information provided by industry associations or individual companies that collect reports on accidents (see subpart 2(c)); and
- the possibilities of natural disasters in the vicinity of hazardous installations (such as earthquakes, floods, fires, tornadoes, typhoons, tsunamis) and other issues that might affect the likelihood of accidents or adverse impacts of accidents that occur (see subpart 2(d)).

[37]See subchapter B3 of the *Flexible Framework Guidance* (Assessment Phase).

a. Amount and location of chemicals of concern

*Gathering information about the nature and locations of hazardous substances (*e.g.*, industrial, agricultural, and energy-related chemicals) that are used or handled in the Country including:*

- *types and quantities of hazardous chemicals produced in the Country;*
- *types and quantities of hazardous chemicals imported into the Country;*
- *types of hazardous chemicals used, handled, or stored[38] in different industries, including raw materials and intermediates. This information should include an estimate of the amounts involved, if available. [Note: There are a wide range of industries that use hazardous substances including, for example, food processing/refrigeration, breweries, leather/textiles, paints, pesticide processing, or packaging];*
- *types of hazardous chemicals used, handled, or stored by different government and community bodies. This information should include an estimate of the amounts involved, if available. [Note: authorities use chemicals in a number of different types of facilities such as utilities/power plants, water treatment plants, agricultural chemicals warehouses, waste facilities, swimming pools];*
- *types and quantities of hazardous chemicals transported in the Country and, to the extent information is available, the forms of transport and major transport routes (if the Country chooses to address transport in the CAPP Programme Project); and*
- *extent and nature of hazardous wastes in the Country.*

b. Hazardous installations in the Country

Identifying where installations are located (or may be located), including:

- *information on the types of hazardous installations that are widespread in the Country [Note: each country will be different but typically this might include pesticide storage, pipelines, small businesses that use toxic, flammable, or environmentally hazardous chemicals, mining operations, ports and other transport interfaces where chemicals are stored and/or handled];*
- *mapping of key hazardous installations (the map(s) should include, to the extent possible, the actual location of the installations and each installation's proximity to population centres, sensitive environments, water resources. It should also indicate, if possible, the potential for domino effects); and*
- *plans for future industrial development (*i.e.*, what is expected to occur in the near future that may involve hazardous substances).*

c. Accident case history/chronology

Compiling information on chemical accidents that caused, or could have caused, injuries to workers or the public, adverse environmental impacts, or property damage, or that triggered significant evacuation or shelter-in-place orders. It is also useful to capture information on accidents occurring in neighbouring countries with possible transboundary effects. [Note: At this point, it is sufficient to simply compile the information on accidents; there is no need to analyse the information, or to try to put the information in consistent formats].

The types of accidents that should be included in this Part are:

- *fires involving chemicals;*
- *explosions;*
- *toxic releases;*
- *hazardous substance spills onto land or into bodies of water; and*
- *any other accidents within scope of the* Flexible Framework Guidance*.*

d. Other issues affecting likelihood of accidents or adverse affects

Describing any other factors that might be relevant, so that the Country can decide where there is the greatest need for further action.

The following questions might be helpful in identifying issues that should be addressed:

- *which types of natural disasters could occur near the sites of hazardous installations (including earthquakes, floods, tornadoes, monsoons, hurricanes, typhoons, tsunamis, landslides)?*
- *are there any risk/hazard maps related to natural disasters available for the Country?*

[38]This includes temporary storage facilities and transport interfaces.

- *are there known hazardous installations located near population centres?*
- *have industrial facilities attracted developments (housing, schools, shopping centres, markets, places of worship)?*
- *are there programmes to inform the public about the hazardous installations in their community and what to do in the event of an accident?*
- *are there hazardous installations located near important natural resources (*e.g.*, rivers, drinking water sources, wildlife sanctuaries)?*
- *is there a national system for emergency preparedness? Does this include preparedness for chemical accidents?*
- *are there fire and rescue services available where hazardous installations are located?*
- *are there medical facilities available where hazardous installations are located? Are they prepared and equipped to respond adequately in case of an accident?*

e. Analysis

Analysing the information collected in this Part, and identifying any significant gaps in information related to accident potential and accident history in the Country. The goal is to improve understanding of what hazards/risks exist in the Country and gain insights on what types of relevant information is, and is not, available.

To do this analysis, the following questions might be helpful:

- *is it possible to identify the location of the most significant hazards/risks? If so, where are these and what types of chemicals/hazards are involved?*
- *what additional information is needed to be able to understand the nature and level of hazards/risks in the Country?*

Part 3 Government Infrastructure[39]

This Part provides an overview of the Country's government bodies – ministries, departments, agencies, bureaus, offices – that have some responsibility related to chemical accident prevention and/or preparedness. To the extent appropriate, this could include regional and local bodies, as well as national authorities. For example, in many countries, emergency response (fire, police, medical) is organised at a local or regional level.

For the effective development of a CAPP Programme, it is necessary to understand which authorities are already involved in the development, implementation, and enforcement of relevant laws, regulations, policies and programmes. This will allow the Country to build on existing experience and resources, and identify what gaps might exist.

Text Box 15 includes a list of possible government bodies or types of authorities that might be relevant. Each Country should consider which of those in the list are applicable to its situation and which other government bodies should be included in the Country Situation Report.

This Part should also identify existing coordinating mechanisms and relevant interagency task forces or committees that address issues of interest (*e.g.*, an interagency cooperation mechanism for sound management of chemicals, an oil spill response task force, and/or a national committee for disaster management).

When collecting information, it is important to take into account related activities that could provide insights on what gaps exist and how to allocate responsibilities in the future. For example, the Country might have labour inspectors who don't normally consider chemical accident issues, but might be able to take on additional tasks during their inspections, if trained to identify situations that create risks for a chemical accident.

[39]See subchapter B3 of the *Flexible Framework Guidance* (Assessment Phase).

Text Box 15

COLLECTING INFORMATION CONCERNING RELEVANT AUTHORITIES

The following list identifies authorities that might exist in a country, along with possible allocation of responsibilities, to help Implementing Countries in their effort to collect information for Part 3 of their Country Situation Report. This is not meant to suggest that these authorities should exist, nor does it mean that other authorities in the Country are not relevant. The goal for each Implementing Country should be to prepare an overview of their government infrastructure that accurately reflects the current administrative arrangements using their own terminology.

1. Labour protection – Ministry of Labour/Labour Inspectorate
   a. exposure of workers to chemicals
   b. electrical and mechanical safety in the workplace
   c. classification and labelling of chemicals
   d. fire and explosion prevention in the workplace
2. Environmental protection – Ministry of Environment/Environmental Pollution Inspectorate
   a. release of hazardous substances to air, water, and soil
   b. permitting of hazardous facilities
   c. hazardous waste regulations
   d. prohibited and restricted hazardous substances
   e. control of chemicals including pesticides and fertilisers
   f. international initiatives and conventions (such as Rotterdam Convention (PIC), Stockholm Convention (POPs), Basel Convention (hazardous wastes), Montreal Protocol (substances that deplete the ozone layer))[40]
3. Protection of public health – Ministry of Health
   a. assessing the impacts of acute exposures
   b. planning for adequate health care in the event of an accident
   c. health response to emergencies
4. Trade and industry – Ministry of Trade/Commerce/Industrial Development/Mining
   a. monitoring of imported and exported chemicals/customs controls
   b. classification and labelling of chemicals
   c. registration of factories
   d. control of industrial estates and import/export zones
   e. control of mining operations
5. Safety of food and protection of natural resources – Ministry of Agriculture/Forestry/Fisheries/Interior
   a. registration of pesticides and fertilisers
   b. overseeing the sale, use, and/or storage of agricultural chemicals
   c. classification and labelling of agricultural chemicals
   d. safety of food supply
   e. protection of fisheries
   f. protection of agricultural lands and resources (farms, ranches, etc.)
   g. protection of forests and other natural resources
6. Safety and supply of energy resources – Ministry of Energy
   a. management of pipelines
   b. control of petroleum, oil, natural gas, LNG, gasoline, and other petrochemicals
   c. management of oil drilling facilities (on- and off-shore)
7. Safety of port areas – Port Authority
   a. control of shipments of hazardous substances and handling within port areas
   b. management of port-related storage facilities

[40]For additional information about these international initiatives and conventions, see Text Box 17.

Text Box 15 *(continued)*

8. Fire protection and emergency response – Fire Department/Ministry of Civil Defence
   a. fire and explosion prevention at places of work, public buildings, etc.
   b. emergency preparedness
   c. emergency response
   d. risk communications
   e. chemical hazard control, including storage (*e.g.*, if the National Fire Protection Agency Classification is the basis of chemical hazard classification, then the Fire Department may also be responsible for this)
9. Civil defence – Ministry of Defence/Interior/Military
   a. registration and/or storage of explosive materials
   b. emergency response
   c. disaster and risk reduction
   d. risk communication
10. Land-use planning – Ministry of Interior/Local Authorities
   a. siting of hazardous installations
   b. control of developments near hazardous installations
11. Transport of hazardous goods – Department of Transportation
   a. classification and labelling of substances in transit
   b. standards for transport of hazardous substances
   c. response to transport accidents
   d. management of transport interfaces (*e.g.*, marshalling yards)

Table (i) provides one example of how to assemble information identifying all the authorities in a Country that have responsibilities related to chemical accident prevention and preparedness. Whatever format is used, it is important to be consistent with the Country's circumstances, using the actual names of relevant bodies.

Table (i): Identifying Authorities with Responsibilities related to Chemical Accident Prevention and Preparedness: Generic Template

Name of Ministry/ Agency/ Department Concerned	Responsibilities related to **Importation of chemicals**	Responsibilities related to **Production of chemicals**	Responsibilities related to **Storage of chemicals**	Responsibilities related to **Transport of chemicals**	Responsibilities related to **Distribution/ Marketing of chemicals**	Responsibilities related to **Use/ Handling of chemicals (incl. pesticides)**	Responsibilities related to **Disposal of chemicals/ hazardous wastes**	Responsibilities related to **Oil and/or gas production, distribution, or use**	Responsibilities related to **Labour safety**	Responsibilities related to **Environmental protection (incl. air, water, soil)**	Responsibilities related to **Licensing of Industry**	Responsibilities related to **Explosives**	Responsibilities related to **Fire protection**	Responsibilities related to **Accident prevention and preparedness**
Example: Ministry of Environmental Protection and Forestries					*Example: Requirements for new chemicals marketing and use*	*Example: Controls on pesticide use, packaging, and storage*	*Example: Controls on hazardous waste disposal*			*Example: Air pollution control laws, TRI, water pollution control laws*				
Interagency Bodies (identify name and participating ministries/ agencies)														
Example: National disaster response task force				*Example: Planning/ response for transport accidents*				*Example: Planning/ response for oil spills*				*Example: Planning/ response for major explosions*	*Example: Planning/ response for major fires*	

Part 4 Regulatory and Non-regulatory Context[41]

This Part provides an overview of the Implementing Country's:

- legal instruments (laws, regulations, declarations, decrees, rules, proclamations, decisions, technical requirements, conventions, etc.) related to chemical accident prevention and preparedness including, if appropriate, regional and local instruments;
- non-regulatory mechanisms related to accident prevention and preparedness (such as voluntary collection of information, training programmes, and efforts to exchange lessons learned); and
- other relevant programmes and policies.

As part of the Country Situation Report, relevant legal and regulatory instruments should be described, including clear and specific citations and references.

For the effective development of a CAPP Programme, it is necessary to understand the current legal and regulatory situation. Most, if not all, countries will have some legal instruments relevant to chemical accident prevention and preparedness including those at national, regional, and local levels. Generally, the responsibilities for these legal instruments will be divided among a number of different ministries, agencies, or other authorities.

This information will help to identify which elements of a CAPP Programme already exist in whole or in part, where there may be experience in addressing issues related to chemical accident prevention and preparedness, and where gaps might exist.

Most of the information for this Part should be available from a review of official documents and other government publications/websites as well as interviews with government officials.

a. Legal instruments

Identifying all relevant laws, regulations, and other legal instruments that might impact chemical accident prevention and preparedness, or the management of hazardous substances. These could include, for example, laws related to: toxic substances; toxic emissions; pesticides; oil and gas; hazardous wastes; occupational exposure to hazardous substances; and/or licensing of hazardous operations. For each legal instrument, this part should identify:

- *where the instrument can be found;*
- *what are the objectives of the instrument;*
- *how the responsibilities for the instrument are allocated among national, regional, and local government bodies;*
- *experience with enforcement of the instrument; and*
- *existing or potential overlaps/inconsistencies/conflicts in the instruments.*

Table (ii) is one example of how to assemble this information, which can be adapted for each Country's circumstances.

Set out in Text Box 16 is a set of questions that might facilitate the collection of this information.

[41]See subchapter B3 of the *Flexible Framework Guidance* (Assessment Phase).

Table (ii): Summary of CAPP-related Legal Instruments in the Implementing Country: Generic Template

This table suggests one way to summarise information concerning the laws, regulations, and other legal instruments that are relevant to chemical accident prevention and preparedness, including instruments related to chemical safety more generally. It should be adapted to local circumstances.

Legal Instrument	Responsible Ministries or Bodies	Chemical Use/ Categories Covered	Objective(s) of Instrument	Citation	Experience with Implementation	Notes
Example: Hazardous Waste Management Law (2009)	Ministry of Environment	Hazardous wastes	To control the importation, transportation, and disposal of hazardous wastes	Official register, Chapter xx	Went into effect in 2010; limited experience Two staff members (including one chemist) work on this ½ time	Possible conflict with Basel Convention which is being considered for adoption by legislature

Text Box 16

COLLECTING INFORMATION CONCERNING RELEVANT LEGAL INSTRUMENTS

The questions in this Text Box have been provided to support countries' efforts to collect information for Part 4 of the Country Situation Report. This list of questions is not intended to be comprehensive; but rather is illustrative of the types of inquiries that could help those responsible for preparing the Report.

In summarising each relevant legal instrument, it is important to provide sufficient information to help understand what is actually addressed in the instrument and experience with its implementation.

Classification and labelling of hazardous substances

1. Are there regulations regarding the classification and labelling of hazardous substances? If so, describe what they contain and where they can be found [these might be based on, for example, the EU-CLP, GHS, NFPA, US-DOT[42]].
2. Which ministry/authority is responsible for issuing and enforcing the regulations?
3. What is the scope of the regulations? [For example, do they cover toxics, flammables, explosives, pyrotechnics, fertilisers, pesticides, petroleum based fuels]?
   a. If some substances or groups of substances are excluded from the scope of the main classification regulations, is there another relevant regulation for classification and, if so, which ministry/authority is responsible?
   b. Do the regulations require that MSDS – material safety data sheets – be made available in the local language?
   c. Do the regulations apply to substances produced within the Implementing Country and to imported substances equally?

[42]The EU – European Union – system for the classification and labelling of hazardous chemicals has been regulated under Directive 67/548/EEC and is recognised by orange squares with black symbols, together with Risk (R) and Safety (S) phrases. This will be superseded within the EU by the GHS approach by 2015 under the Regulation (EC) No 1272/2008 on Classification, Labelling, and Packaging (CLP) of substances and mixtures. The regulation harmonises the pictograms and introduces Hazard (H) and Precautionary (P) statements.

GHS – the Globally Harmonized System of Classification and Labelling of Chemicals was developed under the auspices of the United Nations and is characterised by white diamonds with a red frame and black symbols together with Hazard (H) and Precaution (P) phrases.

NFPA – the classification system of the US National Fire Protection Association (NFPA Standard 704) is made up of four coloured diamonds relating to fire hazard, health hazard, reactivity, and specific hazards, such as oxidizer, acid, etc.

USDOT – the system developed by the US Department of Transportation (Title 49, CRF, Part 172) uses a system of coloured diamonds with the hazards indicated.

Text Box 16 *(continued)*

Regulation of construction and operation of hazardous facilities

1. Are there regulations for the permitting of construction of hazardous facilities?
   a. If "yes", what criteria trigger the requirement for a permit?
   b. If "yes", do the permits provide information about the nature and extent of hazardous substances, and the processes involved?
   c. If "yes", which ministry/authority is responsible for issuing and enforcing the permits?
2. Are there regulations addressing the safe operation of hazardous facilities?
   a. If "yes", do they address: labour protection; environmental protection (such as water and soil pollution); and/or fire protection?
   b. Do specific (technical) regulations exist for:
      – pressure vessels and pipework;
      – storage of flammable liquids;
      – storage of gases, including LPG; and
      – explosion protection (*e.g.*, explosive atmospheres, static electricity)?
3. Which ministries/authorities are responsible for:
   a. developing and implementing relevant regulations?
   b. overseeing (inspecting) and enforcing the regulations?

Regulation of chemical accident preparedness

1. Are there regulations which require the operator of a facility to have emergency plans and/or otherwise prepare for emergencies (to have its own fire fighters, hydrants, hazmat response unit, sprinkler systems, etc.)?
   a. If "yes", which ministry/authority is responsible for implementing these regulations?
2. Are there regulations which require the operator to provide information to the local emergency responders (such as lists of hazardous substances, descriptions of potential accident scenarios)?
3. Are there regulations which require on-site emergency drills by the facility and by the emergency responders?
   a. If "no", how is emergency response organised?
4. Are there regulations which require that the local community be informed on the correct action to be taken in the event of a chemical release, fire, or explosion?
   a. If "yes", who is responsible for the communication (i) beforehand, (ii) in the event of an emergency?

Regulation of land use and development

1. Are there regulations concerning where hazardous facilities may be built?
   a. If "yes", must hazardous facilities be inside an industrial zone or separated from residential areas?
2. Are there regulations which require local, regional, or national government to develop land use plans to ensure that hazardous facilities and residential areas and other sensitive locations are maintained with an appropriate separation?
   a. If "yes", is this currently effectively enforced?

b. Non-regulatory mechanisms

Identifying government policies and programmes that might impact chemical accident prevention and preparedness, other than those identified in subpart a of this part 4. Government agencies at national, regional, or local level could be involved in different types of activities to improve chemical safety, such as:

- *programmes to facilitate sharing of experience among companies;*
- *maintenance of a database on accidents (from voluntary reporting or collection from unofficial sources);*
- *training programmes for government and/or private sector experts;*
- *research projects; and*
- *committees or working groups that address chemicals management or safety issues.*

c. International Activities

Collecting information concerning the relationship between the Country and related international (inter-governmental) organisations, as well as relevant regional or bilateral arrangements. Set out in Text Box 17 is a non-exclusive list of possible international activities of interest (organisations and relevant international instruments).

For each relevant organisation/instrument, the Report should describe whether the Country:

- *is a party to an international agreement/convention and, if so, what actions have been taken pursuant to this instrument;*
- *has subscribed to a relevant voluntary initiative;*
- *is involved in related activities with the organisation; and/or*
- *receives support or assistance from the organisation in connection with issues related to chemical accidents or management of chemicals.*

d. Analysis

Analysing the information collected in this Part, and identifying any gaps in the information available related to the regulatory and non-regulatory context in the Country.

To do this analysis, the following questions might be helpful:

- *Are there any obvious gaps in existing regulations?*
- *Are there sufficient mechanisms to monitor the enforcement of legal requirements?*

Text Box 17

IDENTIFYING INTERNATIONAL ACTIVITIES

Collaboration with International Organisations

The following is a non-exclusive list of international organisations involved in issues related to chemical safety and/or chemical accident prevention, preparedness, and response. This is provided to help an Implementing Country determine whether it has been involved with any of these (or other) organisations and, if so, how they might support national efforts to improve chemical accident prevention and preparedness.

- Food and Agriculture Organization of the United Nations (FAO)
- International Labour Organization (ILO)
- Inter-Organization Programme for the Sound Management of Chemicals (IOMC) (including, the Globally Harmonized System of Classification and Labelling of Chemicals)
- Organisation for Economic Cooperation and Development (OECD)
- United Nations Development Programme (UNDP) (*e.g.*, Global Risk Identification Programme)
- United Nations Environment Programme (UNEP) (*e.g.*, APELL, Responsible Production, and activities related to mainstreaming chemicals management into a National Development Plan)
- UNEP-UNIDO (United Nations Industrial Development Organization) (*e.g.*, Cleaner Production Centres)
- United Nations Institute for Training and Research (UNITAR) (*e.g.*, the development of a National Chemicals Management Profile)
- United Nations Regional Economic Organisations including the UN Economic Commission for Europe (UNECE), for Asia and the Pacific (ESCAP), for Latin America and the Caribbean (ECLAC), for Africa (ECA), and for Western Asia (ESCWA)
- World Bank
- World Health Organization (WHO) and/or one of its regional offices
- Other relevant international organisations

International Agreements and Initiatives

The following is a non-exclusive list of international agreements and initiatives (including conventions). This is provided to help the Country determine whether they have been involved with any of these (or other) initiatives and, if so, how this experience might support national efforts to improve chemical accident prevention and preparedness. Those that specifically address chemical accident prevention and/or preparedness are underscored.

Text Box 17 *(continued)*

- ILO conventions:
  - Convention No. 187 concerning the Promotional Framework for Occupational Safety and Health (2006)
  - Convention No. 174 concerning the Prevention of Major Industrial Accidents (1993)
  - Convention No. 170 concerning Safety in the use of Chemicals at Work (1990)
  - Convention No. 155 concerning Occupational Safety and Health and the Working Environment (1981)
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (1989)
- Montreal Protocol on Substances that Deplete the Ozone Layer (a protocol to the Vienna Convention for the Protection of the Ozone Layer) (1987)
- Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (1998)
- Stockholm Convention on Persistent Organic Pollutants (2001)
- UNECE Initiatives:
  - Convention on Transboundary Effects of Industrial Accidents (1992)
  - The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) (2000)
  - The European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR) (1957)
  - UN Recommendations on the Transport of Dangerous Goods – Model Regulations; Fifteenth revised edition (2007)
- WHO International Health Regulations (2005)

Regional Activities/Agreements

Bilateral Activities/Agreements

Part 5 Non-governmental Activities

This Part provides an overview of the activities of relevant non-governmental organisations related to chemical accident prevention and preparedness.

The following are examples of the types of non-governmental organisations that might be addressed:

- industry and professional organisations (such as a national chemical association, an oil and gas industry association, and an association of chemical or process engineers);[43]
- labour organisations and federations;
- large industrial companies, including multinational enterprises;
- universities and research institutes;
- public interest groups which address environmental, public health, or other relevant issues; and
- other community-based organisations and communities in the vicinity of hazardous installations.

This Part should collect information that is easily accessible through formal and informal sources including internet searches, news clippings, and interviews with members of the relevant organisations. This Part is not supposed to be a comprehensive review of activities but rather a short overview to understand what work is going on in the Implementing Country that can complement national efforts. It will also help in the priority-setting process and the development of the Roadmap. There should also be an indication of the gaps that are apparent in this area.

[43]One example of a relevant industry initiative is the "Responsible Care" programme of the International Council of Chemical Associations. See http://www.icca-chem.org/en/Home/Responsible-care.

Part 6 Community Awareness

This Part provides an overview of any activities (by government, industry, and/or other non-governmental organisations), designed to increase awareness of communities located near hazardous installations, so that the potentially affected public has information concerning the nature of local risks and what to do in the event of an accident. This should include a description of any public information/awareness programmes related to hazardous chemicals or chemical accidents, and mechanisms that could be used to improve public awareness.

As with the other Parts of this Report, an effort should be made to gather information that is readily available. It is not intended to require extensive or costly research. There should also be an indication of the gaps that are apparent in this area.

Part 7 Available Resources

This Part collects information on the resources that are currently available, or might be made available, to address chemical accident issues in the Country (see subchapter B3 of the *Flexible Framework Guidance*). The resources could come from governmental or non-governmental sources, including international and bilateral assistance activities and public-private partnerships. This information should allow the Country to understand how to make best use of existing resources, and identify what additional resources might be needed to address priority areas.

The types of resources that should be addressed in this Part include:

- experts/training;
- finances;
- data/information; and
- equipment/technology.

A survey of the government bodies identified in Part 3 of the Country Situation Report and the non-governmental organisations identified in Part 5 should provide much of the information needed to complete this Part.

a. Experts

Describing the types of expertise available for a CAPP Programme; this should include information on where such expertise currently exists in government ministries/agencies or where it might be accessed from non-governmental organisations (including consultants).

In addition to identifying the expertise that is currently available, it would be helpful to include training programmes on subjects related to the different elements of a CAPP Programme. These could include training activities run by schools or universities, industrial or other private sector associations, or non-profit organisations as well as government-run training for employees or others.

Among the types of experts that should be considered are:

- *chemists and chemical engineers;*
- *process engineers;*
- *safety engineers;*
- *laboratory technicians;*
- *inspectors;*
- *land-use planners;*
- *trainers;*
- *administrators; and*
- *enforcement specialists (technical, legal).*

b. Finances

Identifying the source and amount of funding that could be made available from regular budgetary allocations, from possible new allocations, and from one-time grants (including funding from non-governmental or international sources).

c. Data/information

Identifying access to sources of information needed for the development and implementation of a CAPP Programme including, for example, risk assessment studies and national/international databases on chemicals (describing, e.g.*, chemicals' inherent qualities, how chemicals behave in the event of a release, and potential impacts following human exposure or release to air, water, or soil).*

d. Equipment/technology

Describing the availability of the various types of equipment/technology that might be needed for a CAPP Programme over the short- and longer-term. This includes, for example:

- *computer hardware;*
- *computer software;*
- *laboratory equipment;*
- *monitoring equipment (air, water);*
- *personal protective and other equipment for inspectors;*
- *vehicles;*
- *alarm/warning systems; and*
- *equipment for preparedness planning.*

e. Analysis

Analysing the information collected in this Part, and identifying the additional information needed to understand what resources may be available for chemical accident prevention and preparedness activities.

Part 8 Other Relevant Information

This Part captures any other information deemed relevant to the CAPP Programme Project by the Task Force and others involved in the preparation of this Report. This could include, for example, assistance Projects (past or on-going) by UN agencies or international development banks that were not captured in Part 4 and any pending proposals for work in this area.

Part 9 Conclusions

This Part summarises the key parts of the Country Situation Report, and identifies significant gaps in the available information.

Glossary

It is helpful to include a glossary of terms used in the Country Situation Report.

Annex II:
ROADMAP:
Generic Template

The Roadmap is the culmination of the CAPP Programme Project, analysing the Country's needs and priorities, setting the stage for improving chemical accident prevention and preparedness, and identifying the next steps in the establishment of a CAPP Programme. Each Implementing Country's Roadmap will look different, and will be written in a format that works best for that Country. A Generic Template, derived from experience from several CAPP Programme Projects, is provided below.

It is important that a Roadmap sets out a realistic, practical approach that takes into account actual needs and access to resources, rather than tries to create an ideal or comprehensive CAPP Programme that will divert limited resources away from the most important actions.

Roadmap Suggested Table of Contents	
Part 1	**Introduction and Background** *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*
Part 2	**Needs Assessment** *including an identification of gaps and priorities*
Part 3	**National CAPP Programme Goals and Strategies** *including a summary of the Country's short-, medium-, and long-term goals and strategies for achieving these goals*
Part 4	**Action Plan** *including specific steps that can be taken in the short-, medium-, and long-term to meet identified goals*
Part 5	**Mobilising Resources (funding, expertise, equipment, information)** *including a list of the resources that are likely to be needed for the development and implementation of a national CAPP Programme*
Part 6	**Conclusions and Recommendations**
	Glossary
	Selected References

Part 1 Introduction and Background

This Part provides a brief overview of the Roadmap and the national CAPP Programme Project. It can be set out in two parts:

1.1 Purpose and overview of the Roadmap

1.2 Summary of the national CAPP Programme Project, including information on:

- 1.2.1 Task Force composition, activities, and output
- 1.2.2 Workshops and Training Sessions
- 1.2.3 Country Situation Report
- 1.2.4 Additional Information

Part 2 Needs Assessment

This Part provides the basis for determining what elements might be included in the Country's CAPP Programme and helps set priorities for future action. The goal is to identify important gaps that should be addressed when further developing the CAPP Programme, taking into account the Country's specific circumstances.

The Country Situation Report will be helpful in the preparation of the Needs Assessment.

This Part might be organised as follows:

2.1 Key areas of hazards/risks to be addressed

2.2 Review of possible elements of a CAPP Programme, comparing the Country's control system with possible elements of a CAPP Programme described in Chapter C of the *Flexible Framework Guidance*, in order to identify gaps in the Country's existing control system

2.3 Overall analysis of gaps

2.4 Identification of available resources

Subpart 2.1: <u>Key Areas of Hazards/Risks to be Addressed</u>

The following questions may help to prepare this subpart:

- What types of chemical accidents has the Country experienced in the past ten years?
- Are there any types of chemical accidents that have occurred several times?
- Are there installations that have had a number of problems such as lost time incidents or non-chemical fires that indicate that they might not be addressing chemical safety issues?
- Are there geographic areas with a substantial number of hazardous installations?
- What types of hazardous installations exist in the Country?
- Are there plans for introducing new industry(ies) in the Country that involve hazardous chemicals?
- Do existing permits or licenses, or inspection reports (from *e.g.*, labour or fire inspections) reveal concerns about accident risks?
- Was there anything startling or unusual in the Country Situation Report that should be addressed in the short-term in order to improve prevention of, or preparedness for, chemical accidents?
- Were there sections of the Country Situation Report that could not be completed because there was insufficient information available?

Subpart 2.2: Review of Possible Elements of a CAPP Programme

Chapter C of the *Flexible Framework Guidance* lists and describes the elements that are generally included in a comprehensive CAPP Programme. The *Guidance* also contains insights on each of these elements as well as possible pitfalls. This is followed by examples of how the elements are addressed in the ILO and UNECE Conventions, the EU "Seveso Directive", and US regulations.

Each of these elements should be reviewed to determine whether:

a. it already exists in the Country and is sufficient as it is;

b. it exists to a degree but should be amended or expanded;

c. it does not exist and should be addressed in the action plan; or

d. it does not exist but is not a priority.

If a conclusion is reached that the element exists, a specific reference or description of the element should be identified.

If a conclusion is reached that some element needs to be addressed, then there should be a further analysis of:

- *what type of effort would be needed to develop a relevant law, regulation, policy, or programme; and*
- *what resources (experts/training, funds, equipment, information) may be needed for implementation and enforcement.*

To prepare this subpart, the following questions may be helpful. A number of the questions may have already been addressed in the Country Situation Report.

Scope of Programme (see subchapter C2 of the Flexible Framework Guidance*)*[44]

- *Which industries raise concerns in the country (*e.g.*, those which have had accidents in the past, those that are widely located in the country, and/or those that involve the handling of toxic, explosive, or flammable chemicals)?*
- *Are there certain industries that should be specifically included in the CAPP Programme?*
- *Are there certain industries that should be exempted from the CAPP Programme?*
- *Have certain hazardous chemicals been identified as being of a particular concern with respect to chemical accidents in the country?*
- *Are there petrochemical industries in the country?*
- *Are there ports, marshalling yards, or other transport interfaces where quantities of different chemicals are transported and/or stored?*
- *Are there industrial zones where hazardous installations are located?*
- *Is Annex III of the* Flexible Framework Guidance*, containing the lists of chemicals used by other countries to establish scope, helpful in the country's context?*
- *Is the Globally Harmonized System of Classification and Labelling of Chemicals relevant to the country (see Text Box 7 of the* Flexible Framework Guidance*)?*

Role of Authorities – Information Management (see subchapter C3(b) of the Flexible Framework Guidance*)*

- *Do authorities have access to information on chemicals, including information related to their inherent characteristics, how they may act in the event of a release, and the potential impact on human health and the environment?*
- *Do authorities have information on hazardous activities and processes?*
- *Do authorities routinely collect information on chemical accidents? Do they maintain records on chemical accidents?*
- *Are there systems to manage the information needed for a CAPP Programme (including the equipment and staff to maintain the systems)?*

[44]The first element – Scope – is necessary, to be addressed by all countries taking into account the nature and extent of risks that exist, or might exist in the near future, as well as the extent of resources available.

- *Is there a national database containing information on enterprises that produce, use, or otherwise handle hazardous substances?*
- *Do any national, regional, or local authorities keep records of enterprises in their vicinity?*

Role of Authorities – Inspections (see subchapter C3(c) of the Flexible Framework Guidance*)*

- *Does the country have staff and resources that can be assigned to a CAPP Programme inspection?*
- *Does the country have inspectors who routinely visit industrial facilities (*e.g.*, labour or fire inspectors)? If so, could they be trained to also inspect for chemical safety?*
- *Is there a requirement under existing law to look at chemical safety during inspections?*

Role of Authorities – Preparedness Planning (see subchapter C3(d) of the Flexible Framework Guidance*)*

- *Which authorities are responsible for preparedness planning (national, regional, local)?*
- *Which authorities are responsible for response to fires, explosions, or other types of adverse effects? Are they prepared to respond to chemical accidents (*e.g.*, having HAZMAT training, equipment)?*
- *Which authorities are responsible for natural disasters? Are they prepared to respond to chemical accidents?*
- *Are preparedness plans tested in practice in collaboration with local authorities?*
- *Is there an appropriate infrastructure in place to deal with emergencies (fire stations, hospitals, communication systems, road network)?*

Role of Authorities – Siting and Land-Use Planning (see Chapter C3(e) of the Flexible Framework Guidance*)*

- *Are there special zones for hazardous installations or for industry in general?*
- *Do hazardous installations have to receive a permit or license to operate?*
- *Do hazardous installations have to undertake Environmental Impact Assessments?*
- *Which authorities are responsible for land-use planning (national, regional, local)?*
- *Are there requirements for "green zones" around hazardous installations?*
- *Is there any restriction for developments (houses, schools, etc.) from being built right outside the boundary of the industrial installations?*

Requirements of Industry – General Duty Clause (see subchapter C4(b) of the Flexible Framework Guidance*)*

- *Is there a general requirement in the country that all enterprises operate their facilities safely?*
- *What type of legal action can be taken against an enterprise that causes injuries to the public, damage to property, or damage to the environment as the result of an industrial accident?*
- *Are enterprises with hazardous installations required to have a safety policy?*
- *Are enterprises required to have a preparedness plan to mitigate the consequences in case of an accident?*
- *Are enterprises members of the Responsible Care Initiative?*
- *Is there a requirement for industry to inform authorities of hazardous activities?*
- *Are there specific criteria for safety reporting to authorities?*
- *Is there a licensing or permitting procedure that applies to hazardous installations?*
- *Is there a system for permitting by the local fire services that applies to hazardous installations?*
- *What are the current procedures for approval of new hazardous installations?*
- *Does enterprises undertake internal safety management assessments to submit to their regional or global headquarters, when relevant?*

Requirements of Industry – Notification (see subchapter C4(c) of the Flexible Framework Guidance*)*

- *Are owners/operators of hazardous installations required to notify the competent authorities of the existence of such installations?*
- *Are there any industrial facilities that are not within easy reach of an emergency infrastructure?*

Requirements of Industry – Prevention Policy and Safety Management System (see subchapter C4(d) of the Flexible Framework Guidance*)*

- *Are there any requirements for enterprises with hazardous installations to develop and implement a written policy related to chemical accident prevention?*
- *Are there any requirements for enterprises with hazardous installations to develop and implement a written policy related to preparedness planning?*
- *Are there any requirements for enterprises with hazardous installations to develop a safety management system?*
- *Is there a national system for enforcing the implementation of a safety management system?*
- *Does the country have any guidance related to the content of a safety management system?*

Requirements of Industry – Hazard Identification[45] *and Risk Assessment (see subchapter C4(e) of the* Flexible Framework Guidance*)*

- *Are there any requirements for enterprises with hazardous installations to undertake hazard identification and risk assessment for each relevant installation?*
- *Does the country have any guidance related to what constitutes appropriate hazard identification and risk assessment procedures?*
- *Is there a national system for reviewing hazard identifications and risk assessments?*

Requirements of Industry – Safety Reports (see subchapter C4(f) of the Flexible Framework Guidance*)*

- *Are there any requirements for enterprises with hazardous installations to prepare written reports which demonstrate that risks have been assessed and appropriate measures taken to reduce risks and mitigate the effects of accidents?*
- *Is there a system in place to collect and review information about hazardous installations?*
- *Are safety reports critically reviewed by authorities?*
- *Are safety reports taken into account in any relevant land-use or zoning decisions?*

Requirements of Industry – Preparedness Planning (see subchapter C4(g) of the Flexible Framework Guidance*)*

- *Is industry required to undertake preparedness planning to mitigate the impacts of any accidents? (what requirements exist for industry to be prepared for emergencies?)*
- *Are enterprises required or do they otherwise cooperate with local authorities and communities to address the possibilities of chemical accidents?*

Information to the Public (see subchapter C5 of the Guidance*)*

- *Are there hazardous installations located near cities or villages, or other developments? If so, does the public in the vicinity know about the installations and what to do in the event of an accident?*
- *What systems exist for dissemination of information (concerning hazardous installations or actions to take in the event of an accident) within communities through, for example, the media, schools, community meetings?*
- *What challenges would there be to sharing information with the public (multiple languages in an area, illiteracy)?*

Accident Reporting, Investigation, and Follow-up (see subchapter C6 of the Flexible Framework Guidance*)*

- *Are enterprises required to inform authorities if there has been a serious accident? If so, are records kept of the accidents? Where?*
- *Do authorities have any authority to investigate accidents? Is there an organisation/agency responsible for accident investigations?*
- *Is there a system for disseminating the results of investigations (so others can benefit from lessons learned)?*
- *Does industry do its own investigation? If so, do authorities have access to the information?*

[45]The Hazard Identification Tool of the Joint UNEP-OCHA Environment Unit is one example of tools that can support hazard identification activities in the country. Available at http://www.eecentre.org/Portals/0/Docs/HIT_Users_guide.pdf

Subpart 2.3 Overall Analysis of Gaps

Based on the information from subparts 2.1 and 2.2, as well as an analysis of the Country Situation Report, the Country should consider what gaps may exist with respect to:

- policies and legal instruments (laws, regulations, etc.) to address different aspects of chemical accident prevention and preparedness, and the enforcement of these policies and legal instruments;
- infrastructure (for example, concerns related to the country's institutional arrangements for addressing chemical accident prevention and/or preparedness);
- resources that may be needed for a CAPP Programme (financial, expertise, technology); and
- information required to improve chemical accident prevention and preparedness.

Subpart 2.4: Identification of Available Resources

This subpart provides an overview of all the resources that are, or may be, available to support efforts to improve chemical accident prevention and preparedness in the country. In addition to the government resources, it should address resources that could be accessed from industry, academia/research institutes, non-governmental organisations, and other sources.

It should include an assessment of the following categories:

- technical expertise;
- equipment/technology;
- data/information; and
- budget.

This can be based on Part 7 of the Country Situation Report, updated in light of the information gained during the course of the CAPP Programme Project and taking into account the analysis from subpart 2.3 of this Roadmap.

Table (iii) suggests one way for collecting, organising, and analysing information for the review of CAPP Programme elements. Each country should determine the best way to organise its information based on its particular situation, recognising that it might be difficult to include so much information in one table.

Table (iii): Reviewing CAPP Programme Elements: Generic Template

CAPP Programme Elements	a. Element exists and is sufficient *Provide legal reference to where it can be found, and the responsible ministry/ agency*	b. Element exists but should be amended *Provide legal reference to where it can be found, and the responsible ministry/ agency. Also indicate what types of amendments are needed (if known)*	c. Element does not exist *Does it need to be included in action plan (yes or no)?* *If yes, indicate what is needed (if known)*	d. Assessment of Priorities *For each element that requires action, indicate whether it is a high, medium, or low priority (if known)*
Scope of the Programme (*FF* Chapter C2)				
Role of Authorities (Government) (*FF* Chapter C3)				
Information Management (*FF* subchapter C3(b))				
Inspections (*FF* subchapter C3(c))				
Preparedness Planning (*FF* subchapter C3(d))				
Siting and Land-use Planning (*FF* subchapter C3(e))				
Requirements of Industry (Hazardous Installations) (*FF* Chapter C4)				
General Duty Clause (*FF* subchapter C4(b))				
Notification (*FF* subchapter C4(c))				

Table (iii): Reviewing CAPP Programme Elements: Generic Template *(continued)*

CAPP Programme Elements	a. Element exists and is sufficient *Provide legal reference to where it can be found, and the responsible ministry/ agency*	b. Element exists but should be amended *Provide legal reference to where it can be found, and the responsible ministry/ agency. Also indicate what types of amendments are needed (if known)*	c. Element does not exist *Does it need to be included in action plan (yes or no)?* *If yes, indicate what is needed (if known)*	d. Assessment of Priorities *For each element that requires action, indicate whether it is a high, medium, or low priority (if known)*
Prevention Policy/Safety Management Systems (*FF* subchapter C4(d))				
Hazard Identification and Risk Assessment (*FF* subchapter C4(e))				
Safety Reports (*FF* subchapter C4(f))				
Preparedness Planning (*FF* subchapter C4(g))				
Information to the Public (*FF* Chapter C5)				
Accident Reporting, Investigation, and Follow-up (*FF* Chapter C6)				

Part 3 National CAPP Programme Goals and Strategies

This Part summarises the Country's goals with respect to chemical accident prevention and preparedness and then identifies specific strategies for achieving these goals. It is important that the goals be realistic and attainable, and be subject to a timetable. In order to understand whether the goals are being achieved, it is useful to have indicators that can measure achievement.

This Part might be organised as follows:

3.1 Overall Vision: identifying a clear description of the future, with realistic aspirations

3.2 Goals related to the national CAPP Programme (these should be specific, measurable, and subject to a time schedule)

- 3.2.1 Overall objectives
- 3.2.2 Objectives related to prevention of chemical accidents
- 3.2.3 Objectives related to preparedness for chemical accidents

3.3 Strategies for achieving the goals/objectives

Part 4 Action Plan

This Part maps out the specific activities that the Country plans to take to meet their identified goals, in light of the strategies described in Part 3.

This Part should identify activities for the short-term, medium-term, and longer-term. It is important that the action plan is realistic in light of resources, and that there is sufficient information to provide a guide for moving forward.

For each of the activities included in the action plan, there should be an effort to specify:

- who will have the lead responsibility;
- which additional government and non-government organisations should also be involved;
- what are the resource implications (experts, finance, equipment, information);
- how will this impact the Country's institutional arrangements; and
- what is the schedule/timetable, perhaps identifying milestones.

The focus should be on the short-term, *e.g.*, key activities that can be completed within two years, in order to achieve concrete results. In most cases, there will be a limited number of short-term activities. There should be more detailed information available for these short-term activities, with clear information on where the necessary resources (including funds and expertise) can be found.

The longer-term activities will likely be more complex and will take time, resources, and experience to complete. The determination of which activities should be designated as "short-term" and which should be "medium-term" or "long-term", should be based on an analysis of priorities and resources.

Tables (iv) and (v) contain possible formats for organising the information related to the action plan. Table (iv) provides an overview of the activities planned for the short-, medium-, and longer-terms, and expected time frame. Table (v) is based on the information from Table (iv) and could help a Country follow the progress of the high-priority activities they expect to complete in the short-term.

Table (vi) focuses on short-term activities, where there can be more detailed information about the nature of the task, the responsible organisations, and resource allocations.

Table (iv): Short-, Medium-, and Long-term Activities: Generic Template

Table (iv) is designed to provide an overview of all the activities planned by the Country and described in the Roadmap with a view to the development and implementation of an improved CAPP Programme. It is divided into short-, medium-, and long-term activities which can be listed for the various elements of the CAPP Programme. This Table, or something similar prepared to meet the needs of the Country, can provide insights on the allocation of responsibilities for the various activities as well as the related resource implications.

Relevant Element	**Priority Activity** (from Table iii)	**Lead Agency(ies) or Organisation(s)** (including contact person, if known)	**Other Agencies or Organisations Involved** (at national or local levels, including non-governmental organisations)	**Description of Tasks** (as detailed as possible)	**Resources Needed: Technical Expertise**[46]	**Resources Needed: Equipment**	**Resources Needed: Information**	**Resources Needed: Budget**[47]	**Expected Outputs and Schedule**
5.1 Short-Term Activities (identify time frame , e.g., 18 months)									
Activity S-1									
Activity S-2									
etc.									
5.2 Medium-Term Activities (identify time frame)									
Activity M-1									
Activity M-2									
etc.									
5.2 Long-Term Activities (identify time frame)									
Activity L-1									
Activity L-2									
etc.									

[46]Expertise might include: chemists, chemical engineers, process engineers, safety engineers, lab technicians, inspectors, land-use planners, trainers, administrators, and enforcement specialists (technical, legal). This might also address training activities needed to prepare staff for their responsibilities.

[47]The Implementing Country may wish to create a list of those activities that can be completed without any additional resources. This will help identify those activities that can be addressed first. At the same time, efforts can be made to identify and collect the resources needed for other priority activities.

Table (v): Checklist for Short-Term Activities: Generic Template

Table (v) is based on the information from Table (iv) and helps the Implementing Country follow the progress of the high-priority activities they expect to complete in the short-term. Each time the Roadmap is reviewed, this Checklist should be updated, eliminating the items that have been completed, analysing why certain activities have been delayed, and adding new activities for the next two-year period.

Activity Name	**Lead Agency and Contact Person(s)**	**Other Agencies and Organisations Involved** (national, local, governmental, non-governmental, including contact person(s) if known)	**Tasks** (detailed description)	**Resources to be Allocated for each Task** (technical expertise, equipment, information, budget)	**Schedule and Milestones** (including expected start and completion dates)

Table (vi): Timeline for Short-Term Activities: Generic Template

Table (vi) adapted to local needs, can be used to keep track of the tasks that should be carried out over the course of a two-year period. This could help to follow progress on the different tasks that are planned during this period and provide insights on whether schedules need to be revised to take into account unexpected delays or progress that exceeded expectations.

Time Frame	Activities (provide specific descriptions)	Expertise Needed	Other Resources Needed	Notes
Months 1-2	Task 1:			
	Task 2:			
	Task 3: (add more rows as needed)			
Months 3-4				
Months 5-6				
Months 7-8				
Months 9-10				
Months 11-12				
Months 13-16				
Months 17-20				
Months 21-24				

Part 5 Mobilising Resources (funding, expertise, equipment, information)

This Part summarises the resources that are likely to be needed for the development and implementation of a CAPP Programme, including funding, expertise, equipment, and information. This should build upon the prioritised activities and related resource needs identified in Part 4. Resource mobilisation should be described for the short-term, medium-term, and long-term.

The assessment of the resources can then be compared with the list of available resources as described in subpart 2.4.

The result should be an understanding of what additional resources may be required to meet the Implementing Country's objectives. Based on this calculation, the Country can start to identify, to the extent possible, an action plan for mobilising resources.

Part 6 Conclusions and Recommendations

This Part summarises the key parts of the Roadmap, describing the overall objectives of the national CAPP Programme and the action plan for meeting these objectives. There should be a particular focus on the activities that are expected to be taken in the short-term, with details on how to move forward with these activities and a related time-frame.

Glossary

It is helpful to include a glossary of terms used in the Roadmap.

Selected References

It is helpful to include a list of the references referred to in the Roadmap.

Annex III:
TASK FORCE TERMS OF REFERENCE:
Generic Template

Every Task Force should have written Terms of Reference (TOR), which includes clear information on its objectives, membership, activities, and responsibilities. Specifically, the Terms of Reference should address the following:

Background

This includes:

- an overview of the UNEP Flexible Framework Initiative;
- a description of what authority exists to move forward with the CAPP Programme Project;
- an identification of the key organisations (internal and external) involved with the Project;
- the source of funding for the Project activities; and
- the expected time-frame for the Project.

Objectives

This describes the overall objectives of the CAPP Programme Project, including the expected outcomes, as well as the specific objectives of the Task Force.

Duration

This identifies the term of the Task Force, taking into account that it (or a similar inter-agency body) should continue after the Project, in order to facilitate CAPP Programme development, implementation, and review.

Members

This addresses who will be invited to join the Task Force, taking into account;

- individuals should be identified (not just agencies/ministries);
- that Task Force members should be at an appropriate level with the authority, experience, and leadership to move the Project forward;
- there is need for continuity, with members committed to attending meetings;
- the size of the Task Force, recognising the need to balance inclusiveness with avoiding it becoming so large as to become too cumbersome to carry out its responsibilities;
- whether to designate key members and collaborating members, or establish subgroups such as a management committee and/or a technical committee;
- how to get the expertise needed (*e.g.*, through the assignment of government experts, use of consultants, or involvement of non-governmental organisations); and
- the process for designation or election of a chair or lead agency.

Activities

This describes the Programme of Work for the Task Force, with a timetable, milestones, and identification of which bodies have lead responsibility for each main activity.

Specifically, this should address:

- *Consultations,* describing the process for identifying and reaching out to key stakeholder groups;
- *Task Force Meetings,* including the schedule and duration of meetings, recognising the role of the Task Force throughout the CAPP Programme Project; and
- *Preparation of Reports,* including the Country Situation Report and Roadmap.

Annex IV:
PARTICIPANTS' BACKGROUND INFORMATION QUESTIONNAIRE:
Generic Template

Date of Activity: _____ Location: _____

Personal Details

First name: _____

Last name: _____

Professional Experience

Job title: _____

Employer (name of the agency, company, institute): _____

_____

Employer represents:

- ☐ Government
- ☐ Businesses & private sector
- ☐ NGO
- ☐ Academia and research

If other, please specify: _____

At what level do you work?

- ☐ International level
- ☐ National level
- ☐ Regional level
- ☐ Local level

Short description of job responsibilities: _____

Years of work experience related to chemical accident prevention and preparedness (if any): _____

Education

Level of education (high school, university, graduate level, other): _____

Area of focus: _____

Any other relevant work experience and training you would like to share: _____

_____

What is your interest in the subject and what do you hope to gain from attending this training activity?

_____

_____

Thank you!

Annex V:
PARTICIPANTS' FEEDBACK FORM:
Generic Template

Participants in Workshops and Training Sessions should be asked to provide an evaluation in order that the Support Team and Implementing Country, as well as UNEP, can learn from experience to improve future training activities. A generic template for such a feedback form is included below, which should be amended in light of specific circumstances.

It is expected that Participants can be anonymous in completing the feedback form in order to promote honest and constructive criticism.

Chemical Accident Prevention and Preparedness Training Programme: Feedback from Participants

Date of Programme: _____ **Location:** _____

Personal Details (optional): _____

_____

Where applicable, please select the appropriate number on the scale of 1 to 5:

1 = UNSATISFACTORY 2 = SATISFACTORY 3 = GOOD 4 = EXCELLENT 5 = OUTSTANDING

Overall Evaluation of the Training Activity

1. **Were the objectives of the training activity clearly presented?**

   ☐1 ☐2 ☐3 ☐4 ☐5 Comments:

2. **Please indicate to what extent the content of the training activity supported its objectives.**

   ☐1 ☐2 ☐3 ☐4 ☐5 Comments:

3. **How well did this training activity contribute to deepening your understanding about the topic "chemical accident prevention and preparedness"?**

   ☐1 ☐2 ☐3 ☐4 ☐5 Comments:

4. **How well did this training activity contribute to gaining knowledge that is relevant to your work?**

   ☐1 ☐2 ☐3 ☐4 ☐5 Comments:

5. **Please describe to what extent your participation in the training activity has contributed to expanding your professional network in the field of chemical accident prevention and preparedness.**

   ☐ Not at all Comments:

   ☐ To some extent

   ☐ To a significant extent

6. **Please choose the option that best describes how the training activity met your requirements regarding level of complexity.**

- ☐ Too advanced — Comments:
- ☐ At the right level
- ☐ Too basic

7. **Please describe how you plan to utilise knowledge you acquired during the training activity and what (if anything) you are now better prepared to do.**

8. **Which of the following audiences do you think should be the future target of the training activity like this? You can choose more than one option.**

- ☐ Politicians
- ☐ Senior public sector decision-makers
- ☐ Technical experts (government)
- ☐ Consultants
- ☐ Private/business community
- ☐ Researchers
- ☐ Communities
- ☐ Others (please specify)

9. **Please choose the option that best describes how time was allocated for the overall training activity.**

- ☐ Appropriate
- ☐ Too much time (should be shorter) — If too much time, what should be shortened?
- ☐ Insufficient (needed to be longer) — If insufficient, what should be added?

10. **Please indicate how well time was allocated for various sessions during the training activity.**

Sessions	Insufficient	Appropriate	Too much
Theoretical Content			
Group Exercises			
Group Discussion			
Experience Sharing			
Field Work			
Informal Conversations			

Comments:

Content of the Training Activity

11. **Please indicate the relevance and usefulness of materials provided (texts, exercises, handouts, reference materials).**

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 Comments:

12. **Please evaluate the quality of the translation of materials provided (if relevant).**

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 Comments:

13. **Please evaluate the relevance and usefulness of presentations (consider the content (*e.g.*, clarity of instruction, achievement of the presentation's objectives), training methods used, participation engagement, and discussion).**

Session (Instructor)	Content	Mode of delivery	Participants engagement	Discussion
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Comments:

14. **What important subjects were not covered in the training activity and should be added in the future?**

15. **What subjects were included in the training but you think should be deleted from future training activities? Please explain why (because, for example, they were not very relevant, too basic)?**

Organisation and Coordination

16. **Please indicate what you think of the meeting venue**

	1	*2*	*3*	*4*	*5*
Meeting Room					
Food					
Accommodation					
Location (accessibility)					

Comments:

17. **Please evaluate the quality of the interpretation provided during the training activity, if relevant.**

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 Comments:

18. **Please indicate what you think of the overall coordination provided before and during the training activity.**

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 Comments:

Final Suggestions

19. **What did you like MOST about this training activity?**

20. **What did you like LEAST about this training activity?**

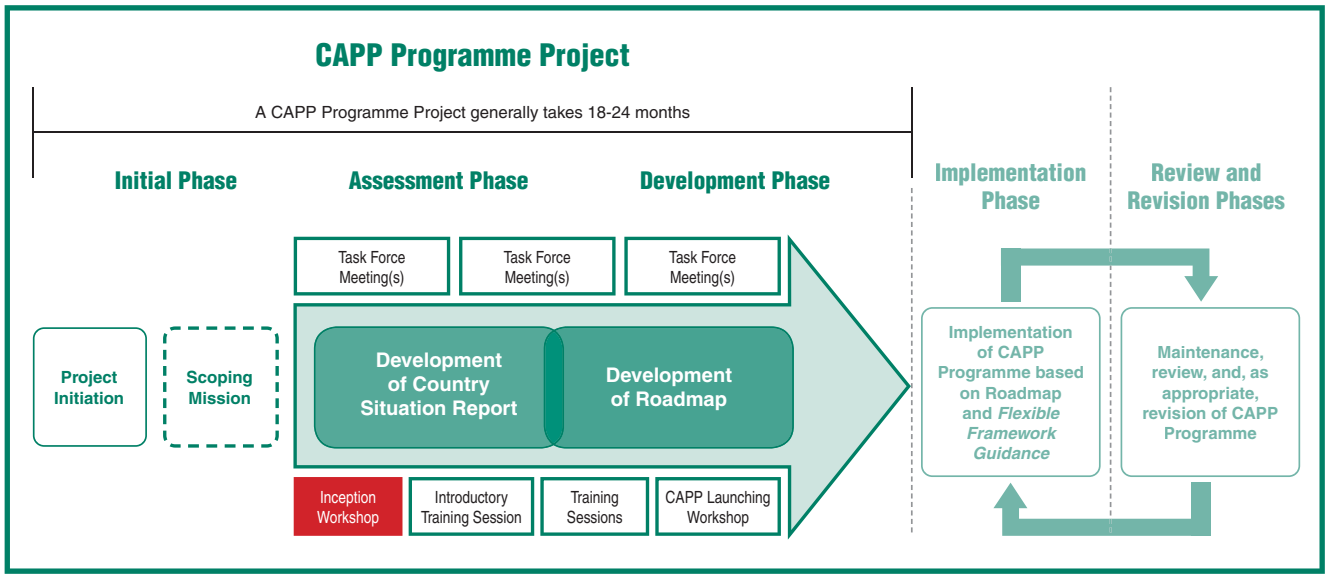
21. **What other types of training activities related to chemical accident prevention and preparedness would you be interested in attending?**

22. **Please provide recommendations for improving this training activity (be specific).**

23. **If you have any further suggestions or comments after submitting this questionnaire, please contact us at (add relevant contact information).**

Thank you!

Annex VI:
INCEPTION WORKSHOP:
Generic Agenda



Purpose of the Inception Workshop

The Inception Workshop serves to officially launch the CAPP Programme Project. It should take place after an initial consultation process between the Technical Support Partner and the Implementing Country has determined that there is appropriate political support, as well as sufficient resources, for the Project.

The Inception Workshop should aim to:

- *raise awareness about risks associated with hazardous installations and the importance of improving chemical accident prevention and preparedness;*
- *provide an overview of UNEP's Flexible Framework Initiative and* Flexible Framework Guidance *for Addressing Chemical Accident Prevention and Preparedness;*
- *explain the CAPP Programme Project, including an overview of its purpose, expected activities, and outcomes;*
- *review the Country's current situation in terms of chemical risk management and accident prevention and preparedness;*
- *discuss the respective roles, responsibilities, and activities of the Country and Support Team in the CAPP Programme Project;*
- *identify internal and, as appropriate, external organisations that could be involved in the Project, including the ones that could contribute to the development of the Country Situation Report; and*
- *secure a commitment to move forward, identifying next steps and setting a timetable.*

Expected Outcomes

There are four primary outcomes expected from the Inception Workshop:

- *an enhanced appreciation of the importance of having an appropriate chemical accident prevention and preparedness programme;*
- *improved awareness of key aspects of the national situation in terms of both the nature and extent of risks in the Country as well as existing programmes, policies, and mechanisms to address aspects of chemical accident prevention and preparedness;*

- *a consensus to move forward with the CAPP Programme Project, along with a common understanding of the roles and responsibilities of the Focal Point, Task Force, and Participants as well as the Support Team; and*
- *agreement on the next steps for moving the Project forward, including identification of the preliminary composition of the Task Force.*

Planning the Inception Workshop

To supplement the guidance provided in the ISP (see Chapter 2(a)), this section highlights some practical recommendations for planning the Inception Workshop.

Duration: Generally, an Inception Workshop will last about one and a half days.

Target audience: It is the responsibility of the Implementing Country (generally the Focal Point(s)) to identify and invite the Participants to the Inception Workshop (and to all workshops and training sessions).

Given that this is an awareness-raising activity and the launch of the CAPP Programme Project, with limited technical content, it is important to involve key decision-makers from the relevant government ministries and other bodies with responsibilities related to chemical accident prevention and preparedness. This should include individuals who will be members of the Task Force. It should also include the more technical staff who will likely be involved with the development and implementation of a CAPP Programme as well as representatives of non-governmental stakeholders, such as industry, labour unions, universities, environmental groups, and other community-based organisations (see Chapter 3(d) of the Implementation Support Package for additional insights for choosing Participants).

While it is preferable to have continuity with respect to participation in all the Project-related training activities, this might not be always possible. This particularly applies to the Inception Workshop, as many of those attending should be high level officials who might not be available to attend the future CAPP-related training sessions.

Flexibility and modularity: It is important that the Technical Support Partner works together with the Implementing Country to create a Workshop agenda that is relevant to the Country, taking into account the expected target audience as well as relevant local factors.

Presentations and supporting materials, in particular PowerPoint presentations, should be adjusted and supplemented by the Technical Support Partner and Instructors in light of local conditions, needs of the expected audience, and the objectives identified by the Implementing Country, as well as time and resources available. In addition, Instructors should "personalise" their presentations taking into account their own experience (see Chapter 4 of the Implementation Support Package for detailed guidance for Technical Support Partners and Instructors).

Generic Agenda

The following identifies the subjects ("modules") that will generally be included in an Inception Workshop. The amount of time allocated to any subject, and the order of presentations, will differ among countries.

An Inception Workshop should begin with an opening ceremony, introducing the Workshop and the expected content and outcomes. This opening session should also serve to introduce the Focal Point and members of the Support Team (including the Instructors). As appropriate, representatives of United Nations agencies in the Implementing Country can be invited to provide remarks. Following the opening ceremony, Participants should introduce themselves, as appropriate.

Module 1: Overview of the Inception Workshop

This module presents:

- objectives, content, and expected outcomes of the Inception Workshop;
- background information on UNEP's Flexible Framework Initiative; and
- goals and expected outcomes of the CAPP Programme Project.

Module 2: Introduction to Chemical Accidents

Module 2 helps to create a common understanding of what is meant by "chemical accidents" or "accidents involving hazardous substances", including the causes and possible consequences of such accidents. It should present examples of relevant past accidents as well as an identification of potentially hazardous activities.

As part of this module, it is important for Participants to understand how chemical accidents differ from other chemical-related issues.

Module 3: Chemical Accident Prevention and Preparedness

Module 3 provides an overview of how to address chemical accident prevention and preparedness and the benefits of implementing a CAPP Programme (including health, environmental, economic, and political benefits).

Participants should be introduced to the *Flexible Framework Guidance*, including the elements of a CAPP Programme, the process of using the *Guidance*, and how this can be applied in their Country. The module can also describe the experience of different countries and organisations in developing CAPP Programmes, providing an historical perspective of how regulations concerning chemical accident prevention and preparedness have evolved over time.

Module 4: CAPP in the Country

Module 4 provides an opportunity for representatives of the Implementing Country to present information about the Country's current situation relevant to CAPP, and to identify issues and concerns. It should also encourage all Participants to share experiences, lessons learned, and good practices.

Participants should come to the Workshop prepared to exchange information on:

- past chemical accidents in the Country including lessons learned;
- the nature, extent, and location of possible hazardous installations in the Country and any plans for future industrial development of this kind;
- the types and quantities of hazardous chemicals produced, used, transported, or otherwise handled in the Country; and
- vulnerable areas and populations in the event of a chemical accident.

In addition, this Module should include a discussion on:

- the existing legal, regulatory, and policy framework in the Country;
- the roles and responsibilities of the different governmental bodies (ministries, departments, agencies, bureaus, offices) related to chemical accident prevention and preparedness including, as appropriate, local and regional governmental bodies and non-governmental entities such as industry, professional associations, labour unions, NGOs, etc.; and
- resources (expertise, technology, funding, training) related to CAPP available in the Country.

Module 5: CAPP Programme Project Information

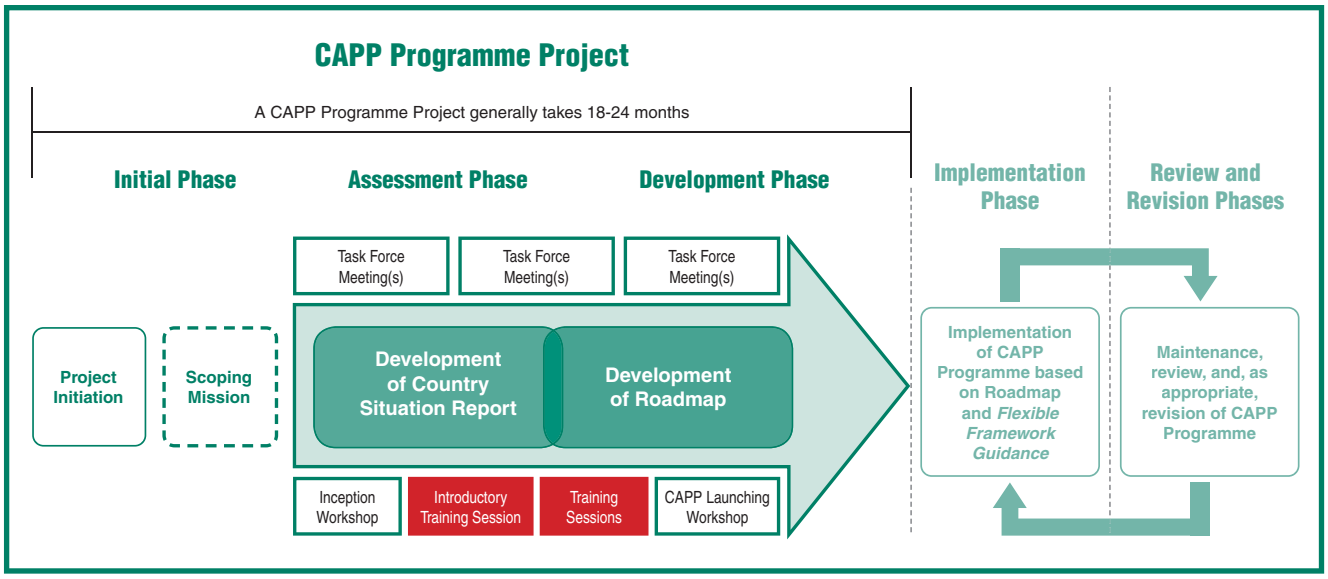
Module 5 provides a comprehensive description of a CAPP Programme Project, including its objectives, activities, and expected outputs (*e.g.*, the Country Situation Report and Roadmap) as well as a timeline for implementation. Participants should gain a clear understanding of the roles and responsibilities of the Implementing Country and of the Support Team.

Module 6: Workshop Closure: Conclusion and Next Steps

Module 6 should aim at collecting Participants' feedback on the Inception Workshop, identifying their concerns and ideas on Project implementation, and setting the stage for moving forward with the Project. In this regard, Participants should help identify the preliminary composition of the Task Force, along with its key roles and responsibilities, and a tentative schedule for the Project's activities. They should also help to identify organisations not present at the Workshop that should be involved in the Project.

To facilitate the discussion, it may be helpful for Participants to be divided into smaller groups.

Annex VII:
TRAINING SESSIONS:
Generic Curriculum



Purpose of the Training Sessions

The Training Sessions should be designed to:

- *ensure that decision-makers and technical staff in the Implementing Country (from authorities, industry, and other stakeholder groups) have an understanding of the key issues related to chemical accident prevention and preparedness;*
- *familiarise Training Session Participants with the* Flexible Framework Guidance *and other relevant materials;*
- *describe the possible elements of a CAPP Programme and how these can be adapted and implemented in practice;*
- *improve understanding of technical subjects and teach specific skills needed to develop and implement a CAPP Programme; and*
- *identify the steps for developing a CAPP Programme that meets the needs of the Implementing Country.*

For some countries, in particular those with limited expertise and experience related to chemicals management, it may be helpful to organise an additional session – an Introductory Training Session – to explain general concepts related to chemical accident prevention and preparedness and outline activities planned for the CAPP Programme Project. The Introductory Training Session would, to a certain extent, recap the information provided during the Inception Workshop and provide background information to help Participants understand the later training sessions.

More specifically, the Introductory Training Session should review the Implementing Country's current situation in terms of chemical accident risk management and accident prevention as well as other aspects of the Country Situation Report. It should seek to ensure a common understanding of key concepts such as hazard, hazardous activities, and chemical accidents. Furthermore, an Introductory Training Session can provide an opportunity to explain how UNEP's *Flexible Framework Guidance* can be used to develop and implement a CAPP Programme.

Expected Outcomes

The Training Sessions should aim to:

- *develop an enhanced understanding of the key concepts related to chemical accident prevention and preparedness and a familiarity with the* Flexible Framework Guidance *and the CAPP Programme Project, including the elements of a CAPP Programme;*
- *create a core group of government officials, as well as representatives of industry and others, with an interest in addressing chemical accident prevention and preparedness, with an improved understanding of key issues, and with the information and skills needed to develop and implement a CAPP Programme;*
- *revise/improve the Country Situation Report and provide input into the development of the Roadmap;*
- *define next steps in the process of CAPP Programme development and implementation including insights on what further resources (funding, expertise, equipment, information) may be needed; and*
- *motivate decision-makers and others to move forward with timely action, to the extent resources are available.*

Planning the Training Sessions

To supplement the guidance provided in the main text of this ISP (see Chapters 2(a) and Chapter 4), this section highlights some practical recommendations concerning planning of the Training Session.

Flexibility and modularity: It is critical that the Training Sessions be designed to take into account the specific circumstances and needs of the individual Country. The draft Country Situation Report should help guide the development of the curriculum for each Training Session.

In order to maximise the value of the Training Sessions, the Technical Support Partner should work together with the Implementing Country to plan these sessions carefully and develop curriculums that are relevant to the Country's specific situation, taking into account the expected target audience. Experience has underscored the importance of knowing the background, experience, and interests of the Participants in order to have an effective Training Session.

The planning process should take account of the fact that most countries will assign a mixture of technical experts and generalists to a CAPP Programme Project. For example, it may be useful to have some modules organised with breakout sessions in order to divide the audience into smaller groups.

This curriculum suggests a set of modules:

- seven for an Introductory Training Session, if held, numbered (i)-(vii); and
- eighteen for the general Training Sessions (numbered 1-18).

The Implementing Country and TSP should work together to create appropriate Training Sessions building upon, modifying, and adding to these modules and choosing the order of presenting information.

Duration: There is no set schedule for the Training Sessions. Some countries have chosen to have one session that lasted five days; others have held two separate sessions each lasting three or four days (with several months between each session).

If an Introductory Training Session is held, it will normally take an additional two or three days, generally two or more months before the first regular Training Session(s).

Target audience: Participants should include technical experts, managers, and others that are (or may be) responsible for CAPP Programme development and implementation. The objective is to include representatives of ministries and other government bodies and, as appropriate, representatives from non-governmental stakeholders, including industries, universities, public service organisations, and others. It is desirable for the Task Force members to also attend but, in many countries, these are senior officials who are not available for the Training Sessions (see Chapter 3(d) of this ISP for additional criteria for choosing Participants).

To support Participants' efforts, they should receive a Handbook and related supporting materials sufficiently in advance of the Training Session so that they have the opportunity to familiarise themselves with the subject (see Text Box 8 of the ISP).

In some cases, it may be helpful to have a separate module(s) for the most technical subjects, and provide this training to a limited group of Participants (*i.e.*, those who have more technical experience and who might be involved in technical activities in the future).

Generic Curriculum

As indicated above, some countries will choose to hold an Introductory Training Session, before the general Sessions.

The following identifies the subjects (“modules”) that can be included in an Introductory Training Session (modules (i)-(vii), followed by a list of modules for the regular Training Sessions (modules 1-18). The amount of time allocated to any subject, and the order of presentations, will differ among countries.

Each Training Session should begin with an opening ceremony, introducing the Session and the expected content and outcomes. This opening will generally begin with officials representing the Implementing Country and Technical Support Partner. As appropriate, representatives of United Nations agencies, including those from UNEP and UNDP in the Implementing Country, can also be invited to provide remarks. Following the opening ceremony, Instructors and, as appropriate, Participants should introduce themselves.

Introductory Training Session

Module (i): Overview of the Introductory Training Session

Module (i) presents:

- objectives, content, and expected outcomes of the Introductory Training Session;
- background information on UNEP's Flexible Framework Initiative; and
- goals and expected outcomes of the CAPP Programme Project.

Module (ii): Introduction to Chemical Hazards

Module (ii) focuses on key concepts such as:

- what a chemical accident is and what it is not;
- causes and consequences of chemical accidents;
- chemical hazards and risks;
- chemical classification;
- potentially hazardous activities/processes including the types of industry associated with hazardous activities; and
- hazard identification and risk assessment.

Module (iii): CAPP in the Country

Module (iii) provides an opportunity for Participants to present information about their Country, identify issues and concerns, and share experiences.

This Module should also include an overview of the Country Situation Report, seeking input from Participants to further elaborate its contents.

Module (iv): Chemical Accident Prevention and Preparedness

Module (iv) provides an overview of how to address chemical accident prevention and preparedness and the benefits of implementing a CAPP Programme (including health, environmental, economic, and political benefits).

Participants should be introduced to the *Flexible Framework Guidance*, including the elements of a CAPP Programme, the process of using the *Guidance*, and how this can be applied in their Country. The Module can also describe the experience of different countries and organisations in developing CAPP Programmes, providing an historical perspective of how regulations concerning chemical accident prevention and preparedness have evolved over time.

Module (v): CAPP Programme Project Information

Module (v) provides a comprehensive description of the CAPP Programme Project, including its objectives, activities, and expected outputs (*e.g.*, the Country Situation Report and Roadmap). Participants should gain a clear understanding of the roles and responsibilities of the Implementing Country and of the Support Team.

Module (vi): Overview of the Elements of a CAPP Programme

Module (vi) provides an overview of the elements that may be included in a CAPP Programme, as described in the *Flexible Framework Guidance*.

Particular focus may be placed on identifying the "scope" of a CAPP Programme, based on an understanding of the nature and level of risks in the Country.

This Module should also describe the roles and responsibilities of industry, authorities, and others in the development and implementation of a CAPP Programme, as well as the need for cooperation and communication among stakeholders.

Module (vii): Workshop Closure: Conclusion and Next Steps

Module (vii) aims at collecting Participants' feedback on the Session, identifying their concerns and ideas on Project implementation, establishing a work plan for moving forward with the Project and, specifically, activities that should take place before the next training activity.

To facilitate discussions, it may be helpful for Participants to be divided into smaller groups.

Training Sessions (general)

Module 1: Overview of the Training Session

Module 1 reviews the CAPP Programme Project including the actions to date within the Country. If an Introductory Training Session was held, there should be a summary of the results of that Session.

Module 2: What is a CAPP Programme

Module 2 provides a review of some of the discussions of the Inception Workshop and Introductory Training Session, focusing on ensuring that there is an understanding of key concepts including:

- what is meant by a “chemical accident” or “accident involving hazardous substances”;
- hazardous installations that might create a risk in the Country; and
- the differences between chemical accident prevention and preparedness programmes and other activities related to chemicals management (such as those dealing with control of pesticides, waste management, occupational health and safety, and more general public health and environmental protection).

Depending on whether there is an Introductory Training Session, this Module may include a discussion of how other countries have developed and implemented relevant regulations.

Module 3: The Country Situation Report

During Module 3, Participants learn about the progress to date with respect to the development of the Country Situation Report. Generally, representative(s) from government bodies involved with the preparation of the Report (and, as appropriate, non-governmental representatives) will describe the information collected or created for the Report.

All Participants should be invited to comment on the Country Situation Report and to provide suggestions for supplementing and/or improving the Report.

Module 4: The *Flexible Framework Guidance*

Module 4 contains an explanation of the *Flexible Framework Guidance*, providing insights on using the *Guidance* including both:

- Chapter B, describing how to develop or improve a CAPP Programme (set out in five phases); and
- Chapter C, setting out the elements that could be included in a CAPP Programme.

This Module might include breakout discussions and/or exercises to help ensure understanding of Participants before moving into a more detailed discussion of the elements.

Module 5: Roles and Responsibilities of Industry, Authorities, and Others

Module 5 provides an overview of the roles of different stakeholders in chemical accident prevention and preparedness, focusing on:

- the responsibility of enterprises for the safe operation of their enterprises;
- the role of government in providing leadership and establishing appropriate laws, regulations, and policies to improve prevention and preparedness; and
- the role of the public and other non-governmental stakeholders.

It should also address the importance of cooperation, consultation, and communication in both the development and the implementation of a CAPP Programme (see Chapter 3 of this ISP and Chapters B and C of the *Flexible Framework Guidance*).

Module 6: Setting the Stage for Regulating Hazardous Installations

Module 6 builds on Module 3, in order to improve understanding of the hazards/risks associated with particular facilities (requiring an understanding of the types of processes and installations that are within a facility).

Module 6 should focus on two key elements of a CAPP Programme:

- *Scope:* how to identify which hazardous installations should be subject to any controls or policies. In addition to learning how this has been done in other countries, Participants will be able to discuss the types of installations and hazardous substances that may raise concerns in their Country (see subchapter C2 of the *Flexible Framework Guidance*); and
- *General Duty Clause:* what this means and how this is applied in other countries (see subchapter C4(b) of the *Flexible Framework Guidance*).

Module 7: Hazard Identification and Risk Assessment

Module 7 focuses on understanding key concepts including: chemical hazards and risks, potential consequences of chemical accidents, and the importance of hazard identification and risk assessment in any CAPP Programme.

During this Module, there may be a discussion of hazard identification and risk assessment methods, including their purpose and how they are used. For audiences with more technical expertise (*e.g.*, engineers and scientists), the Module can provide a more detailed a description of the goals of, and methodologies for, hazard identification and risk assessment (see subchapter C4(e) and SG-2 of the *Flexible Framework Guidance*).

Consideration should be given to including exercises to reinforce the information provided.

Module 8: Documentation Requirements

Module 8 addresses the two types of documentation requirements described subchapter C4 of the *Flexible Framework Guidance*:

- *Notification requirements*, which imposes an obligation on industry to provide authorities with some basic information about their hazardous installations; and
- *Safety reports*, which requires owners/operators of certain hazardous installations to demonstrate that the risk posed by their installations have been systematically assessed and that appropriate measures have been taken to reduce risks and mitigate accidents.

This Module should address the purpose of these documentation requirements and their elements, including the responsibilities of industry for developing and providing the information and the role of authorities in reviewing the information in order to better understand the nature and extent of the risks in their country.

The discussion of safety reports will build on Module 7 since a key objective of the safety report is to document the hazards/risks at the installation as well as the risk management measures that are in place. It should also provide insights to guide the development of an appropriate safety management system.

Safety reports provide authorities with insights for establishing priorities within the CAPP Programme, understanding what to focus on during inspections, improving preparedness planning, and identifying the need for enforcement measures.

Module 9: Information Management

Module 9 describes the various types of information required by public authorities for the development and implementation of a CAPP Programme. It should also address how to establish the systems needed to collect, generate, catalogue, maintain, and manage the information, as well as the need for cooperation among different authorities and for sharing of data (see subchapter C3(b) of the *Flexible Framework Guidance*).

Module 10: Prevention Policies and Safety Management Systems

Module 10 addresses the need for owners/operators of hazardous installations to have in place appropriate policies and safety management systems, in order to prevent accidents and respond in the event an accident occurs. This should be reflected in any safety report prepared by the owners/operators.

The safety report (or related documentation) provides a basis for authorities to check the capacity of enterprises to operate safely and comply with requirements including, as appropriate, the General Duty Clause (see subchapter C4(d) of the *Flexible Framework Guidance*).

Module 11: Inspections

Module 11 addresses the role of authorities in having effective inspection programmes to check compliance with all requirements, ensure proper safety practices, and share experience with industry (see Chapter C3(c) of the *Flexible Framework Guidance*).

Subjects to be covered include:

- establishing procedures for undertaking inspections (including, *e.g.*, staffing, scheduling, documentation, follow-up, personal safety of inspectors, and the use of PPE);
- setting priorities;
- ensuring that there are sufficient numbers of trained/equipped inspectors;
- preparing inspection reports; and
- addressing identified concerns.

This Module should also address the role of industry in the inspection programme.

It is valuable to include presentations from industry during the Module, as well as a site visit if possible.

Module 12: Preparedness Planning

Module 12 addresses both on-site preparedness planning which is primarily the responsibility of the hazardous installation, and off-site preparedness planning which is generally the responsibility of authorities. This Module should emphasise the importance of cooperation between industry and authorities in preparedness planning, with integration and coordination of on-site and off-site plans. It should also address the role of the public and the need for cooperation between neighbouring communities and between countries sharing a common border (see subchapters C3(d) and C4(g) of the *Flexible Framework Guidance*).

Module 13: Siting and Land-Use Planning

Module 13 describes how siting and land-use policies can help to mitigate adverse effects to the community in the event of an accident. It should address the responsibility of industry to site hazardous installations in a way to minimise adverse effects in the event of an accident. It should also address the role of authorities with respect to establishing land-use and zoning policies related to the location of hazardous installations, as well as to restricting developments near existing installations, in order to maintain appropriate distances between the installations and residences and areas of public use or sensitive environments (see subchapter C3(e) of the *Flexible Framework Guidance*).

Module 14: Risk Communication/Information to the Public

Module 14 addresses the need for the public to be adequately informed about the risks in their community and what actions to take in the event of an accident. It should describe the possible roles of industry, authorities and others in providing information to the public and should provide examples of how this is done in different countries (see subchapter C5 of the *Flexible Framework Guidance*).

Module 15: Accident Reporting and Investigations

Module 15 addresses both:

- the establishment of an accident reporting scheme, requiring hazardous installations to report accidents meeting certain criteria to the authorities; and
- investigations of accidents by industry and authorities to understand the root and contributing causes of key accidents in order to learn lessons and improve accident prevention and preparedness.

(see Chapter C6 of the *Flexible Framework Guidance*).

Module 16: Implementation of the CAPP Programme: Resources, Administrative Structures, Enforcement, and Review

Module 16 addresses a range of issues that authorities will need to consider when moving forward with the development and implementation of a CAPP Programme including:

- access to resources (expertise, equipment, funding, information);
- establishment of appropriate administrative and legal structures;
- enforcement mechanisms; and
- CAPP Programme performance reviews.

Module 17: Transport of Hazardous Substances

The *Flexible Framework Guidance* does not directly address transport accidents involving hazardous substances, although much (if not most) of the information concerning industrial accident prevention and preparedness also applies to transport accidents. Many countries have expressed an interest in discussing transport issues and, therefore, a Module could be included to address how the Implementing Country might apply the *Guidance* to improve prevention of, and preparedness for, transport accidents, what additional issues should be considered, and where to find resources to support efforts to address transport safety.

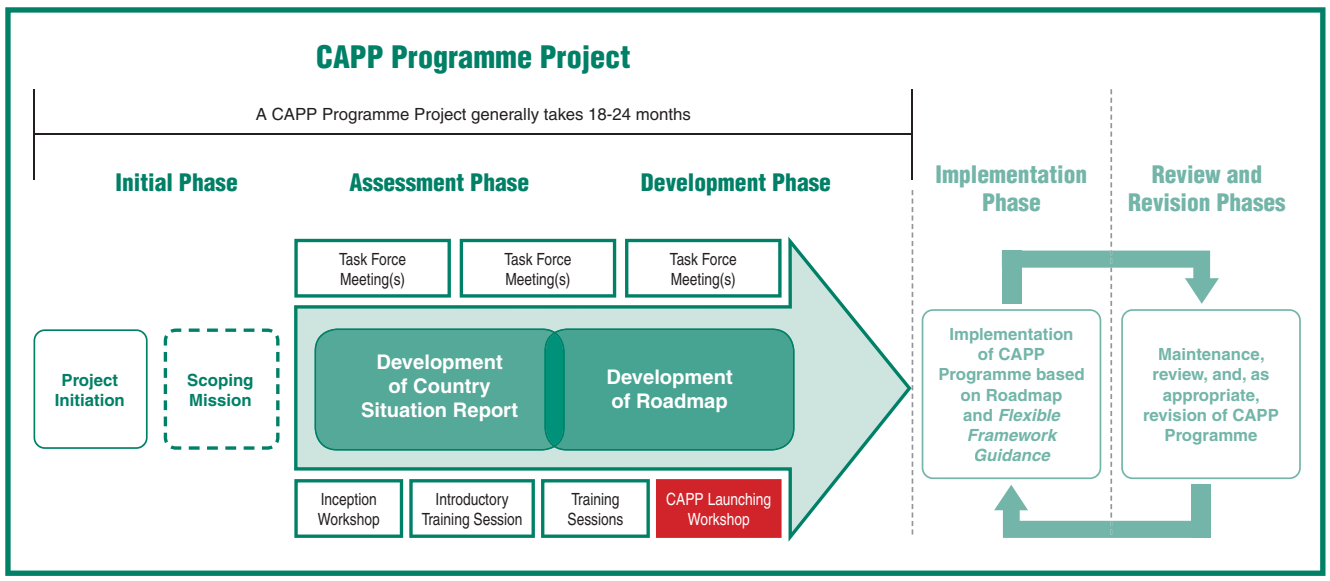
Module 18: Session Closure: Conclusions and Next Steps

Module 18 reviews the key points and conclusions of the Training Sessions, followed by a discussion of next steps with a view to the development and implementation of a CAPP Programme.

This Module should also introduce the "Roadmap", describing a proposed template. There should be an exchange of ideas among Participants concerning the content of the Roadmap. This can include a discussion of, for example, the description of national goals, an assessment of needs, and an identification of steps making up the action plan.

Finally, Participants' feedback on the Session's structure and content should be collected (see Annex V for a Generic Template for a Feedback Form).

Annex VIII:
CAPP LAUNCHING WORKSHOP:
Generic Agenda



Purpose of the CAPP Launching Workshop

The CAPP Launching Workshop should primarily focus on disseminating the results of the CAPP Programme Project, reviewing a draft Roadmap, and setting the stage for continuous development and implementation of a CAPP Programme. In particular, the CAPP Launching Workshop should:

- *review the milestones and the outcomes of the CAPP Programme Project;*
- *share lessons learned and experience gained during the Project with a wider audience;*
- *present and review a draft Roadmap;*
- *discuss future Task Force activities related to the implementation of a CAPP Programme in the short-term;*
- *outline mechanisms that could be established to help "measure" and evaluate achievements of the CAPP Programme and, in particular, to assess whether actions taken are leading to improved safety; and*
- *identify next steps for moving forward, establish a timetable for actions, and prioritise activities especially those identified for the short-term.*

Expected Outcomes

It is expected that the Workshop can reach a consensus to further develop and implement a new/improved CAPP Programme. Ideally, there will be an "agreed" Roadmap at the end of the Workshop or, at a minimum, a clear path for finalising the document. As part of the process of reviewing the Roadmap, Participants will address key aspects for the future development and implementation of the CAPP Programme, such as:

- *short-, medium-, and long-term goals and priorities;*
- *steps for moving forward;*
- *assignment of responsibilities;*
- *an estimation of resources needed;*
- *CAPP-related performance indicators; and*
- *a tentative timetable for the expected activities.*

The Workshop is also expected to identify whether (and what) additional training activities as well as other resources are needed. If possible, a tentative date for reviewing progress in the development and implementation of the CAPP Programme and assessing its achievements should be specified.

Planning the CAPP Launching Workshop

In addition to the guidance materials provided in the ISP, this section highlights some additional practical recommendations that should be taken into consideration when preparing for the Launching CAPP Workshop.

Duration: Generally, the CAPP Launching Workshop will last one day.

Target audience: As the CAPP Launching Workshop mainly focuses on disseminating the results of the CAPP Programme Project and setting the stage for continuous development and implementation of the CAPP Programme, it would be valuable if multiple stakeholder groups are represented in the Workshop including members of the Task Force and other key decision-makers.

Flexibility and modularity: The TSP should work with the Implementing Country to develop an agenda focusing on the modules that are most relevant to the Country's needs and interests, taking into account the overall results of the CAPP Programme Project.

Generic Agenda

The following identifies the modules that will generally be included in a CAPP Launching Workshop. The amount of time allocated to any subject, and the order of presentations, will differ among countries.

The CAPP Launching Workshop should begin with an Opening Session, introducing the Workshop with statements by both high level officials representing the Implementing Country and the Technical Support Partner. As appropriate, representatives of United Nations agencies, including those from UNEP and UNDP in the Implementing Country, can also be invited to provide remarks.

Following the opening ceremony, Instructors and, as appropriate, Participants should introduce themselves.

Module 1: Overview of the CAPP Launching Workshop

Module 1outlines the objectives, content, and expected outcomes of the CAPP Launching Workshop.

Module 2: Review of CAPP-related Activities

During Module 2, Participants review the existing chemical accident prevention practices in the Country and consider the aspects that should be addressed when developing and implementing an improved CAPP Programme. There can also be a discussion of resource needs including expertise, finances, equipment/ technology, and information. Participants should engage in discussions about how these needs can be addressed.

Module 3: Information Management related to Prevention of, and Preparedness for Accidents at Hazardous Installations

Module 3 provides an opportunity to improve understanding of national and international experiences in information management and explore opportunities for improving information management systems in the Country.

Module 4: Milestones and Achievements of the CAPP Programme Project

Module 4 focuses on the achievements and deliverables developed during the implementation of the CAPP Programme Project in the Country. This includes:

- establishment of multi-stakeholder Task Force on CAPP;
- development of Country Situation Report;
- development of Roadmap; and
- capacity building activities.

Module 5: Lessons Learned from the CAPP Programme Project

Module 5 includes presentations on lessons learned from the implementation of the CAPP Programme Project. Among the issues that can be addressed include:

- the Project's impact on the Country's institutional system;
- positive aspects;
- any limitations faced or problems encountered; and
- the way forward.

Representatives of different stakeholders in the Implementing Country (including Task Force, Focal Point(s), governmental bodies, private sector, NGOs, and universities) as well as the Support Team should be invited to present their views.

In addition, Participants should be divided in groups to discuss how the Project's lessons learned can be shared and used to enhance chemical safety in the Country.

Module 6: Roadmap

Module 6 focuses on presenting and reviewing the Roadmap, which encompasses objectives of the Country's CAPP Programme and a clear strategy for moving forward.

During Module 6, Participants should be invited to:

- prioritise activities that need to be implemented in the short-, medium-, and long-terms;
- identify milestones and assign responsibilities;
- identify the needs for additional capacity building activities;
- estimate the resources needed; and
- identify potential performance indicators that can be used to evaluate achievements of the CAPP Programme.

This Module is key to meeting the objectives of the CAPP Launching Workshop and, therefore, should be assigned sufficient time to have a fruitful discussion.

Module 7: Next Steps in the CAPP Programme and Workshop Closure

Module 7 aims at reaching conclusions on concrete steps for developing and implementing the CAPP Programme and setting an approximate timetable for achieving these.

This Module is also an opportunity to collect Participants' feedback on the Workshop (see Annex V for a Generic Template for a Feedback Form) as well as on the entire CAPP Programme Project.

Annex IX: ACRONYMS

This Annex has three parts:

- Part A contains general acronyms related to chemical accident prevention and preparedness;
- Part B contains acronyms used only for purposes of UNEP's Flexible Framework Initiative, including this ISP; and
- Part C contains the acronyms for agencies and international organisations referred to in this Guidance.

a. General Acronyms

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Roads

APELL: Awareness and Preparedness for Emergencies at the Local Level (UNEP)

GHS: The Globally Harmonized System of Classification and Labelling of Chemicals

LNG: Liquefied natural gas

LPG: Liquefied petroleum gas

MoU: Memorandum of Understanding

MSDS: Material safety data sheet

NGOs: Non-governmental organisations

PIC: Prior informed consent

POPs: Persistent organic pollutants

PPE: Personal protective equipment

SMEs: Small and medium-sized enterprises

SMS: Safety management systems

SPI: Safety performance indicators

TDG: Transport of Dangerous Goods (UNECE) (http://www.unece.org/trans/danger/danger.htm)

b. Acronyms related to Flexible Framework Initiative

CAPP: Chemical Accident Prevention and Preparedness

FF: Flexible Framework

ISP: Implementation Support Package

TSP: Technical Support Partner

c. Acronyms of Relevant Organisations

ABIQUIM: Brazilian Chemical Industry Association (Associação Brasileira da Indústria Química) (http://www.abiquim.org.br)

ADPC: Asian Disaster Preparedness Center
(http://www.adpc.net/v2007)

CCPS: Center for Chemical Process Safety
(http://www.aiche.org)

CETEM/CYTED: Centre for Mineral Technology/Latin American Science and Technology Development Programme (Centro de Tecnologia Mineral/Programa Iberoamericano de Ciencia y Tecnologia para el Desarrollo)
(http://cyted.org) (www.cetem.gov.br)

DOT: Department of Transportation (US)
(www.phmsa.dot.gov/hazmat)

EC: European Commission
(http://ec.europa.eu) (http://ec.europa.eu/environment/seveso) See also MAHB

EPA: Environmental Protection Agency (US)
(www.epa.gov/emergencies)

EPSC: European Process Safety Centre
(www.epsc.org)

EU: European Union
(http://europa.eu)

IOMC: Inter-Organization Programme for the Sound Management of Chemicals
(www.who.int/iomc)

IATA: International Air Transport Association
(http://www.iata.org)

ICAO: International Civil Aviation Organization
(http://www.icao.int)

ICCA: International Council of Chemical Associations
(http://www.icca-chem.org)

ICMM: The International Council on Mining and Metals
(www.icmm.com)

IchemE: Institution of Chemical Engineers
(www.icheme.org)

IFCS: Intergovernmental Forum on Chemical Safety
(http://www.who.int/ifcs/en)

IPCS: International Programme on Chemical Safety
(www.who.int/pcs)

ILO: International Labour Organization
(www.ilo.org)

INERIS: French National Institute for Industrial Environment and Risks (Institut National de l'Environnement Industriel et des Risques)
(www.ineris.fr)

ISO: International Organization for Standardization
(www.iso.org)

JEU: Joint UNEP/OCHA Environment Unit
(http://ochaonline.un.org/ochaunep)

JRC: Joint Research Centre (EC)
(www.jrc.ec.europa.eu)

MAHB: Major Accident Hazards Bureau (EC)
(http://mahb.jrc.ec.europa.eu)

MSB: Swedish Civil Contingencies Agency (Myndigheten för samhällsskydd och beredskap)
(http://www.msb.se/en)

NFPA: National Fire Protection Association (US)
(www.nfpa.org)

OCHA: United Nations Office for the Coordination of Humanitarian Affairs
(http://ochaonline.un.org)

OECD: Organisation for Economic Cooperation and Development
(www.oecd.org)

SAICM: Strategic Approach to International Chemicals Management
(www.saicm.org)

UN: United Nations
(www.un.org)

UNECE: UN Economic Commission for Europe
(www.unece.org) (www.unece.org/env/teia)

UNEP: United Nations Environment Programme
(www.unep.org)

UNEP DTIE: UNEP Division of Technology, Industry and Economics
(www.unep.org/dtie)

UNIDO: United Nations Industrial Development Organization
(www.unido.org)

UNITAR: United Nations Institute for Training and Research
(http://www.unitar.org)

WHO: World Health Organization
(www.who.int)