

In any hazardous material incident, regardless of the specific type, information acquisition is critical to the decisionmaking process and to overall management of the incident.

Information and conjecture, based upon experience, education, training and the input of advisory personnel, are used to estimate an incident's potential for harm and its probable course direction.

There are 3 (three) different types of information critical to the Incident Commander (IC). All three types of information are closely related:

**Physical Data** are gathered by the senses, primary from sight and hearing

**Technical Data** are gleaned from reference sources: manuals, text, preplans, computer systems, and technical advisors

**Cognitive Data** it comes from experience, training and education

The information provided must be clear, objective and easily understood, it must be kept in a record (tape, book and the incident summary) and it must have a responsible who will respond if it is required.

## WHAT INFORMATION IS NEEDED ?

We must determinate the priority of the information and this change according to circumstances. The most important information are:

FIRST AID

HAZARD RESPONSE (spill, fire, explosion control)

Other important data are:

Health Effects

Toxicity

Medical Treatment for Victims

Chemical and Physical data

Air Dispersion Models

IDLH (Instant Dangerous Life Hazard) Level

Control and Cleanup techniques

Environmental Hazard

Handling and Storage

Sampling and Analysis

Exposure Control

Engineering Control

This information can be find in numerous manuals, books, computer database, etc. or from specialist of universities, government agencies or industry.

## TO WHOM SUCH INFORMATION SHOULD BE PROVIDED ?

Usually in Hazardous Materials Incident you will find this personnel involved:

<b>FUNCTION</b>	<b>LOCATION</b>	<b>COMMENTS</b>
Firefighters	Local Fire Departments Volunteer Fire Brigades Industrial Fire Brigades	All firemen are trained in fighting structure fires. However not all firefighters are trained in fighting fires involving hazardous materials.
Public Safety	Local and Federal Police National Guard Industrial Security Forces	Public Safety personnel provide for traffic control, crowd control and protection at the scene of the incident
Chemical Experts	National Chemical Emergency Center Local Universities Local Industry	Personnel with expertise in chemistry can provide advice on the properties of the incident material, the best control and any other dangers posed by possible chemical reactions
Environmental Scientist	Government Agencies for Environmental Protection Universities Ecologists Groups	Biologist, hydrologists, geologists and ecologists can project the movement of the materials and estimate the eventual impact on the environment.
Medical Personnel	Ambulance Service Hospitals Red Cross	Treatment of victims of hazardous materials incidents may require decontamination and other procedures not routinely employed. Proper training of medical personnel is important.
Evacuation	Civil Defense Red Cross National Guard Salvation Army	Civil Defense develop "crisis relocation" plans for use in the event of a disaster. Their knowledge is readily applied to hazardous materials incidents
Communications	Emergency Network Local TV and Radio Civil Defense Amateur Radio Club	Radio operators and telephone dispatcher will be especially important.

## *Types of Information considered critical in an accident*

- \* Physical Data
- \* Technical Data
- \* Cognitive Data

1) WHAT INFORMATION IS NEEDED ?

2) TO WHOM SUCH INFORMATION SHOULD BE PROVIDED ?

3) HOW IT SHOULD BE DISSEMINATED ?

Public Health  
Specialist

Emergency teams  
Universities  
Private Health Service

Doctors and public health officials are familiar on the properties of poisonous gases, toxic chemical, petroleum product radioactive material and other hazards.

The information should be provided from specialists to another professional, if it is no possible it should be provided to the official in charge in the area (IC or OSC), keeping a record of all the information given and who received. Eg. : If it is required an information of the results products of a chemical reaction it should be provided by a chemist to another chemist in the incident area or to the Incident Commander who will communicate to the On Scene Coordinator.

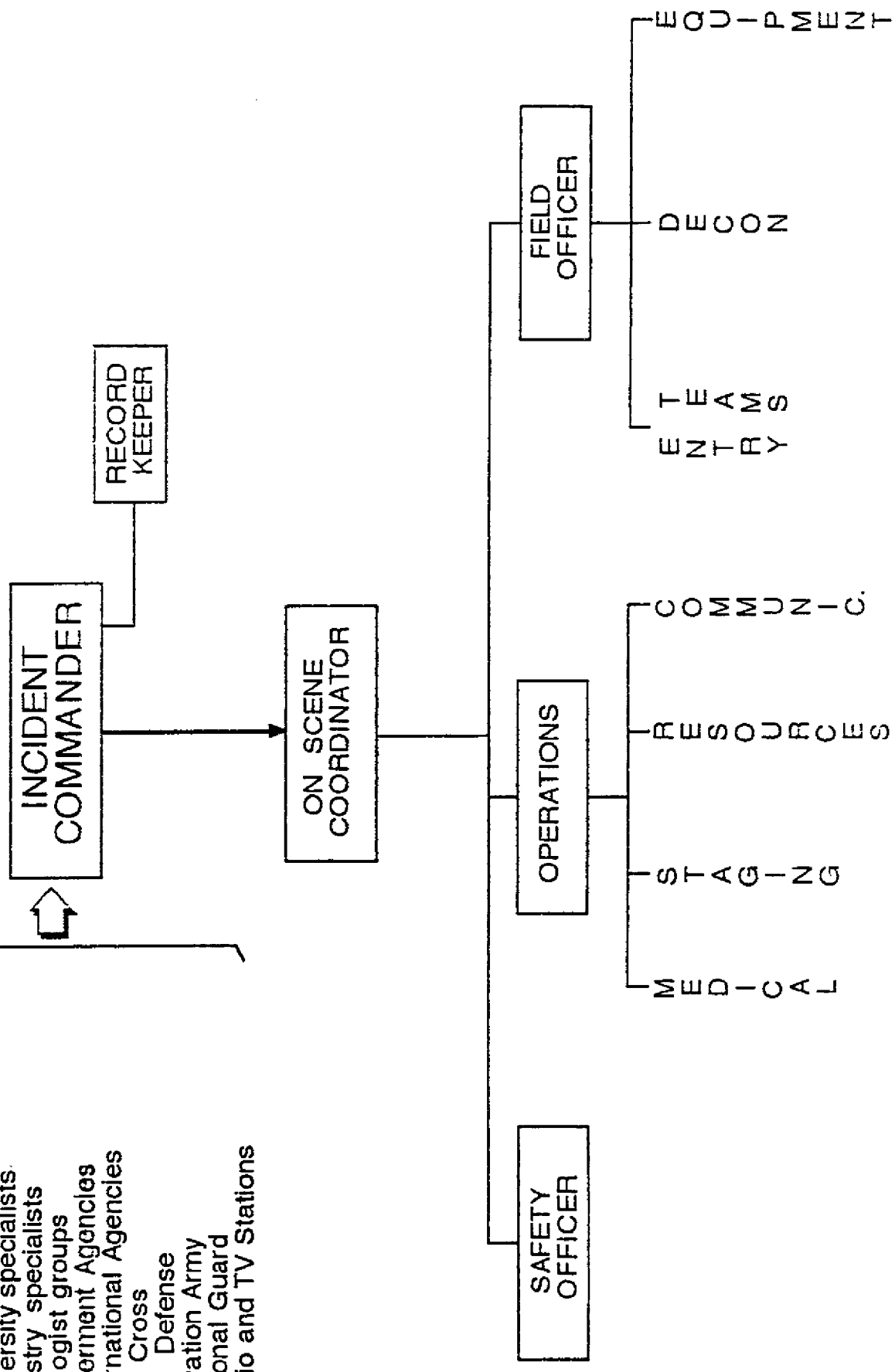
Sometimes there is no a specialist available in the incident area, in that case the communication must have as less technical terms as possible so that the person who receive can understand easily. All the information required must be reported to the Incident Commander (IC), who will communicate to the specialist in the incident arena.

## HOW IT SHOULD BE DISSEMINATED?

The information should be disseminated to all the persons who are affected to the area or to other areas that could be affected. Eg.: The resultant products of a chemical reaction should be communicated to the entry teams, the decon teams and the medical teams.

Here the communications are very important, a good coordination of its, it will insure that the information will reach it destiny clearly. There are many communications systems, the possibility to use different channel to communicate between the personnel affected (Eg. a channel between the entry teams and the On Scene Coordinator) it assure a success in the organization of the response.

National Chemical Emergency Center  
Poison Control Centre  
University specialists  
Industry specialists  
Ecologist groups  
Government Agencies  
International Agencies  
Red Cross  
Civil Defense  
Salvation Army  
National Guard  
Radio and TV Stations



# CHEMICAL INFORMATION

The National Chemical Emergency Centre should be able to provide the following types of information

**\* Information on the chemicals involved in the accident:**

- physico-chemical properties
- hazard reduction techniques
- toxicological properties
- clinical effects of the chemical (including delayed and long-term effects)
- possible transformation or degradation products of the chemical

**\* Information on medical treatment for victims of chemical accidents:**

- first aid
- signs and symptoms expected from exposure (inhalation, ingestion and skin absorption)
- advice on how to decontaminate the patient
- medical treatment (including use of antidote)
- long-term effects
- medical controls (laboratory test to determinate the intoxication of the victims)
- protective measures to avoid becoming contaminated themselves
- location of antidotes (or other drugs) and laboratories for medical controls.

*If an Emergency Control Centre does not exist, the National Chemical Emergency Centre may also need to provide the following types of information*

**IN THIS CASE THE NATIONAL CHEMICAL EMERGENCY CENTER WILL  
ACT AS A CO-ORDINATING CENTRE**

**\* Information on medical facilities to respond to the emergency**

- location of hospitals and their resources
- location of health care centres
- means of transporting victims (ambulances, helicopters, etc.)
- medical specialists

**\* Information on how to contact essential services**

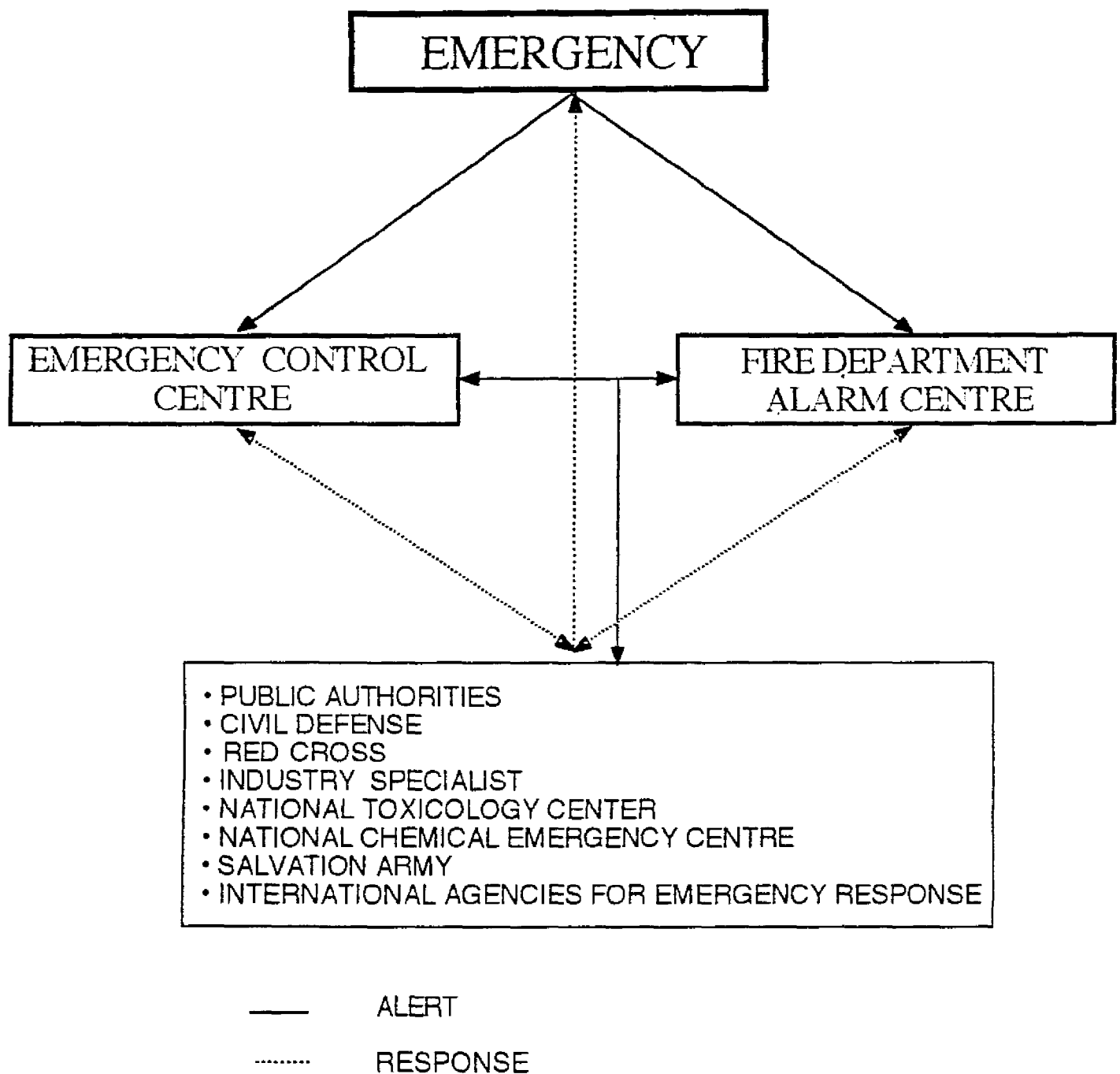
- whom to contact in local authorities, and at what times
- how to contact police, fire and other rescue service
- who has the local co-ordinating role in an emergency

**\* Also needs to have rapid access to information on:**

- details on water supply, in the event of contamination
- list of experts (public authorities and industry) to be consult
- protective and remedial measures available locally
- hazardous points
- emergency response resources available from other region



# ARGENTINE EMERGENCY RESPONSE SYSTEM



Welfare Ministry  
Health Public Secretary

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Center for Toxicological  
Research

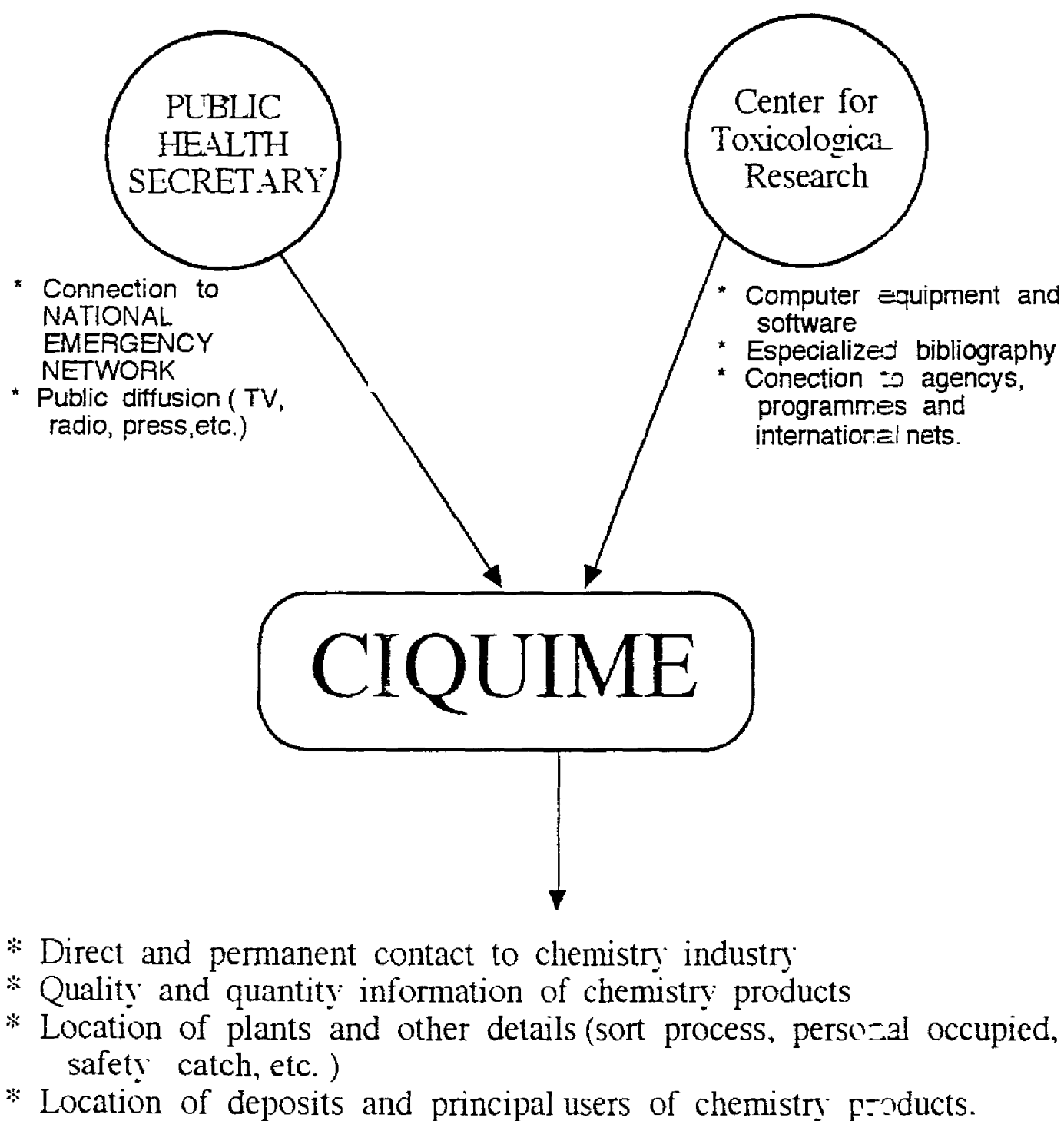
CHEMISTRY INFORMATION

CENTER FOR EMERGENCY

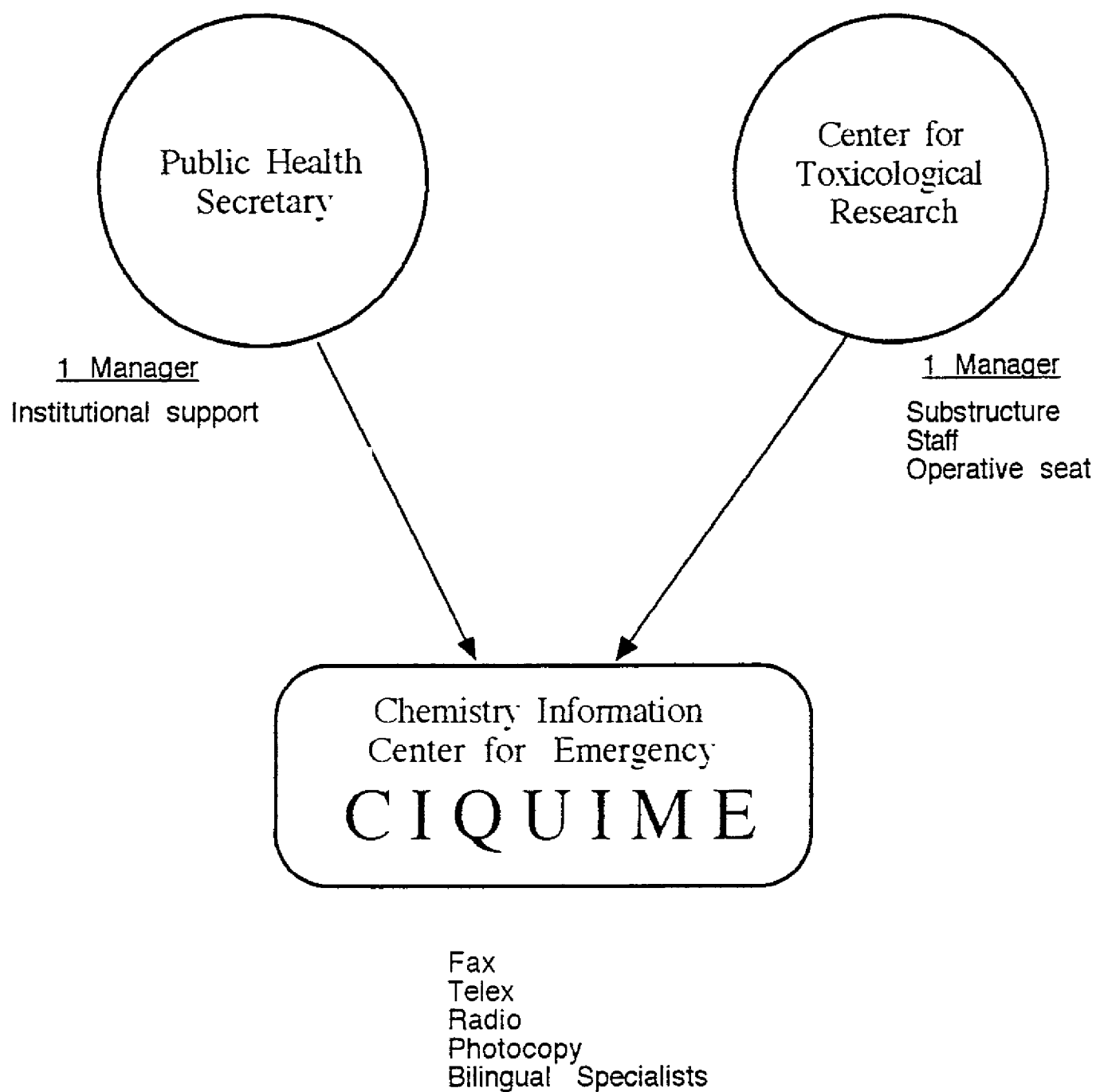
CIQUIME

Buenos Aires  
ARGENTINA

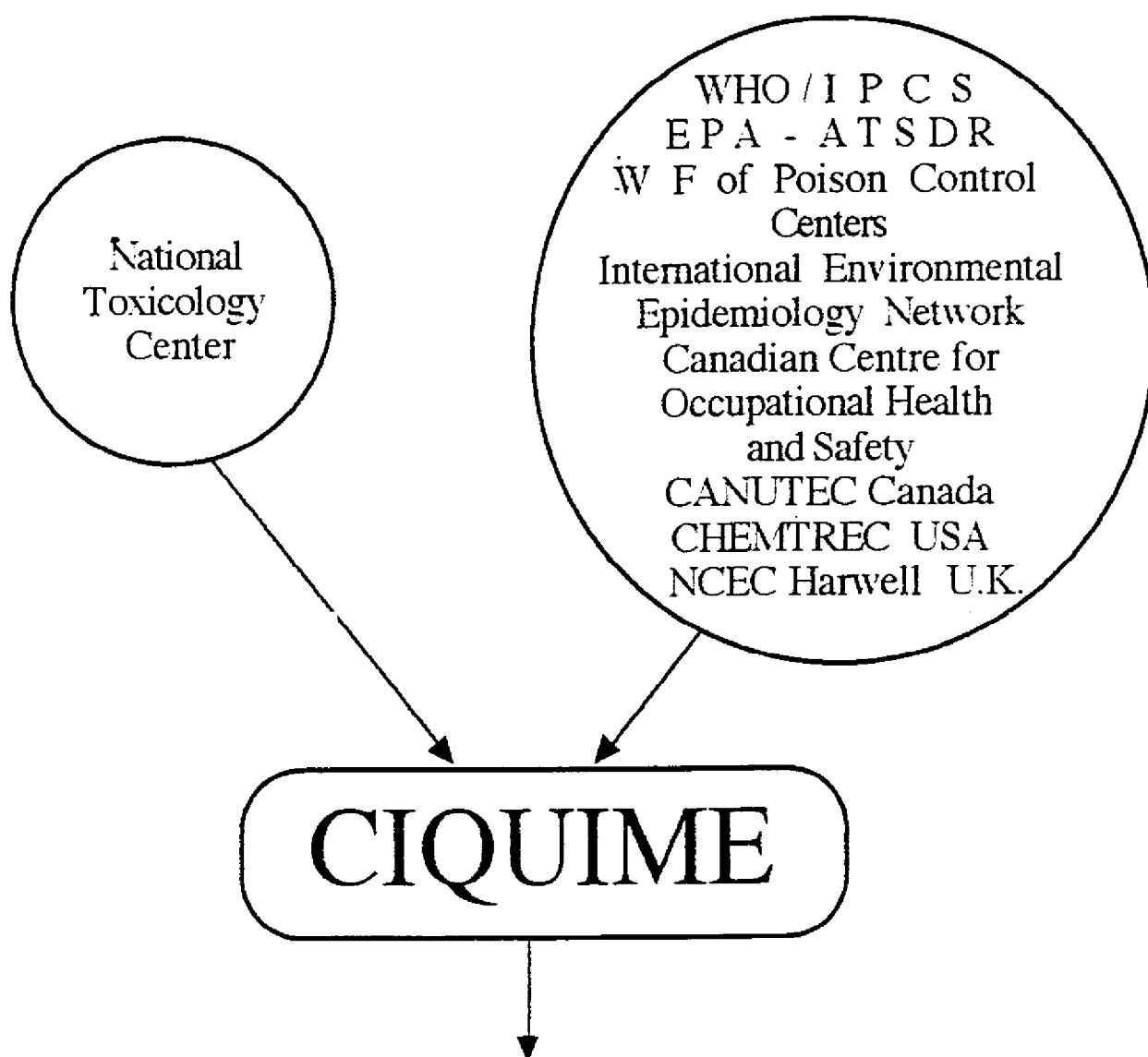
## OPERATIVE



## ECONOMIC - ADMINISTRATIVE



## ACTIVITIES



- \* Integral information, (HOT - LINE) about conducts to follow in accidents cases or chemistry catastrophe ( discharges , gas escape , explosions , etc.)
- \* National map of risks - Danger areas identification.
- \* Census of human resorts ( medicine specialists, security, etc.)
- \* Census of sanitary resorts ( characteristics, facilities , etc. )
- \* Census of equipment and security elements
- \* Minimum and maxim prediction studies
- \* Preparation norms about safe manipulation of danger substances
- \* Making of toxicology primers
- \* Dictation of courses , training programmes , advice to fire brigade , rescue equipment , squad against fires.
- \* Routes of chemistry substances transport - Instruction and information to assistance centers and firemans.

FEDERAL POLICE  
FIRE DEPARTMENT

• **FIREFIGHTERS**

Specially trained:

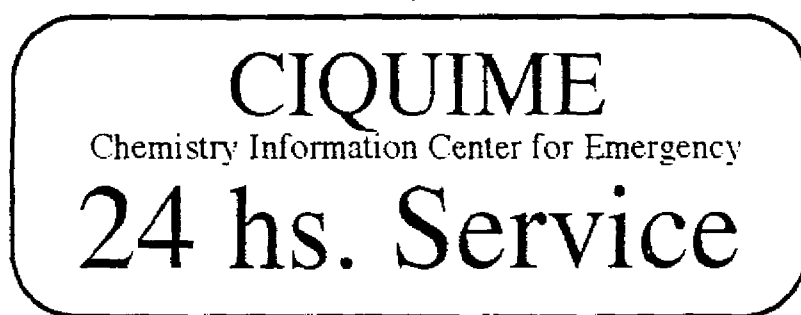
- Bilingual (english-spanish)
- Knowledge about:
  - chemistry
  - rescue
  - first aid
  - radiological emergency
  - computer operation

CHEMISTRY INFORMATION  
CENTER FOR EMERGENCY

• **CHEMICAL SPECIALISTS:**

Specially trained:

- Computer operation
- Bilingual (english-spanish)
- Knowledge about:
  - Engineering
- Mathematics (for air dispersion models)
  - Biology
  - Toxicology



DIRECT AND CLEAR INFORMATION ON STEPS TO  
FOLLOW IN HAZARDOUS MATERIALS INCIDENTS