

Y2K
&
UK National Health Service

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Y2K & UK National Health Service (NHS)

Advice being given to UK NHS organisations to -

- assess the risks to the services they provide

take action to reduce those risks

develop contingency plans to
services of any failures which do occur

Y2K & UK National Health Service

- UK Government approach to Y2K
 - Organisation of the NHS
 - The NHS Y2K project
 - Risks to hospital services, internal and external
Y2K and Primary Care
- Continuity and Contingency Planning and the
relationship with Emergency Planning

UK Government approach to Y2K

“ensure no material disruption to the essential public services of the UK”

UK Millennium Infrastructure Project

- Fuel
- Utilities
- Transport
- Economic
- Supply of Food & Goods
- Communication
- Emergency Services
- Social Provision
- Criminal Justice
- Health Services
- Meteorological Office

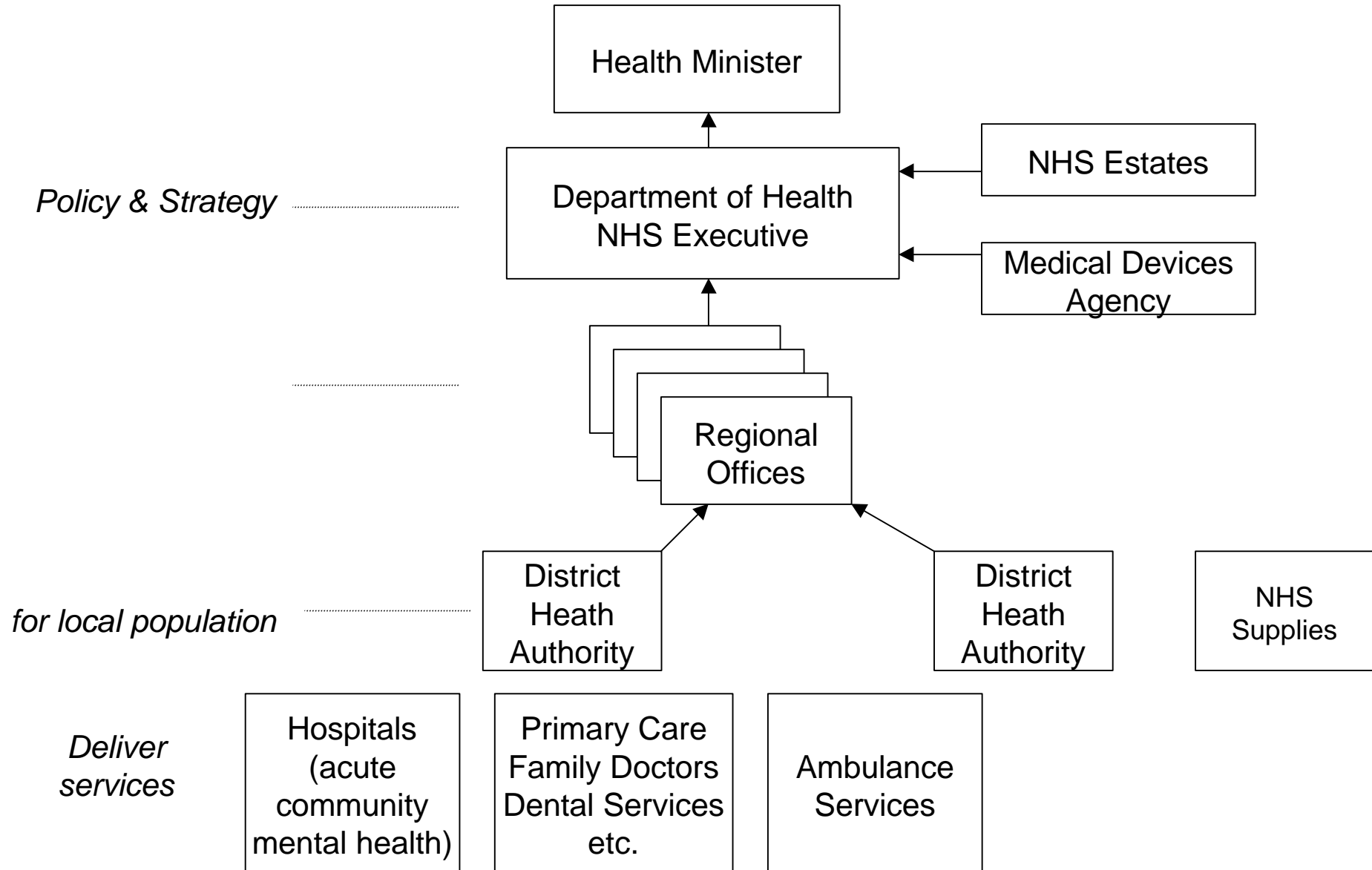
Dependencies Infrastructure - Healthcare

DEPENDENCY	10.1.1 Initiate Service Provision	10.1.2 Transport Patient	10.1.3 Receive Patient	10.1.4 Accommodate Patient	10.1.5.1 Diagnose Patient	10.1.5.2 Treat Patient	10.1.6.1 Refer Elsewhere	10.1.6.2 End Care
1.1 Supply Transport Fuel		C			C	N		
1.2 Supply Coal				C				
2.1.1 Provide Electricity				C	C	C	C	C
2.1.2 Provide Gas				C	C	C		
2.1.3 Provide Oil				N				
2.2.1 Treat Dirty Water				C				
2.2.2 Supply Clean Water				C	C	C	C	N
3.3 Transport People by Bus	N	N						N
3.4 Provide Road Infrastructure	C	C	C			C	C	C
3.5 Transport People and Goods by Rail	N	N						N
6.1 Provide Telecommunications	C	C		C	C	C	C	C
6.2 & 6.3 Distribute Letters and Parcels	C			C	N	C		C
7.2 Provide Ambulance Service		C						
7.3 Police Emergencies	C							
8.3 Manage Sanitation & Waste Disposal				C	C	N		N
8.5 Register Births & Deaths					C	N		C
8.8 Provide Social Services	N						N	N
9.6 Provide Policing Services						N		N

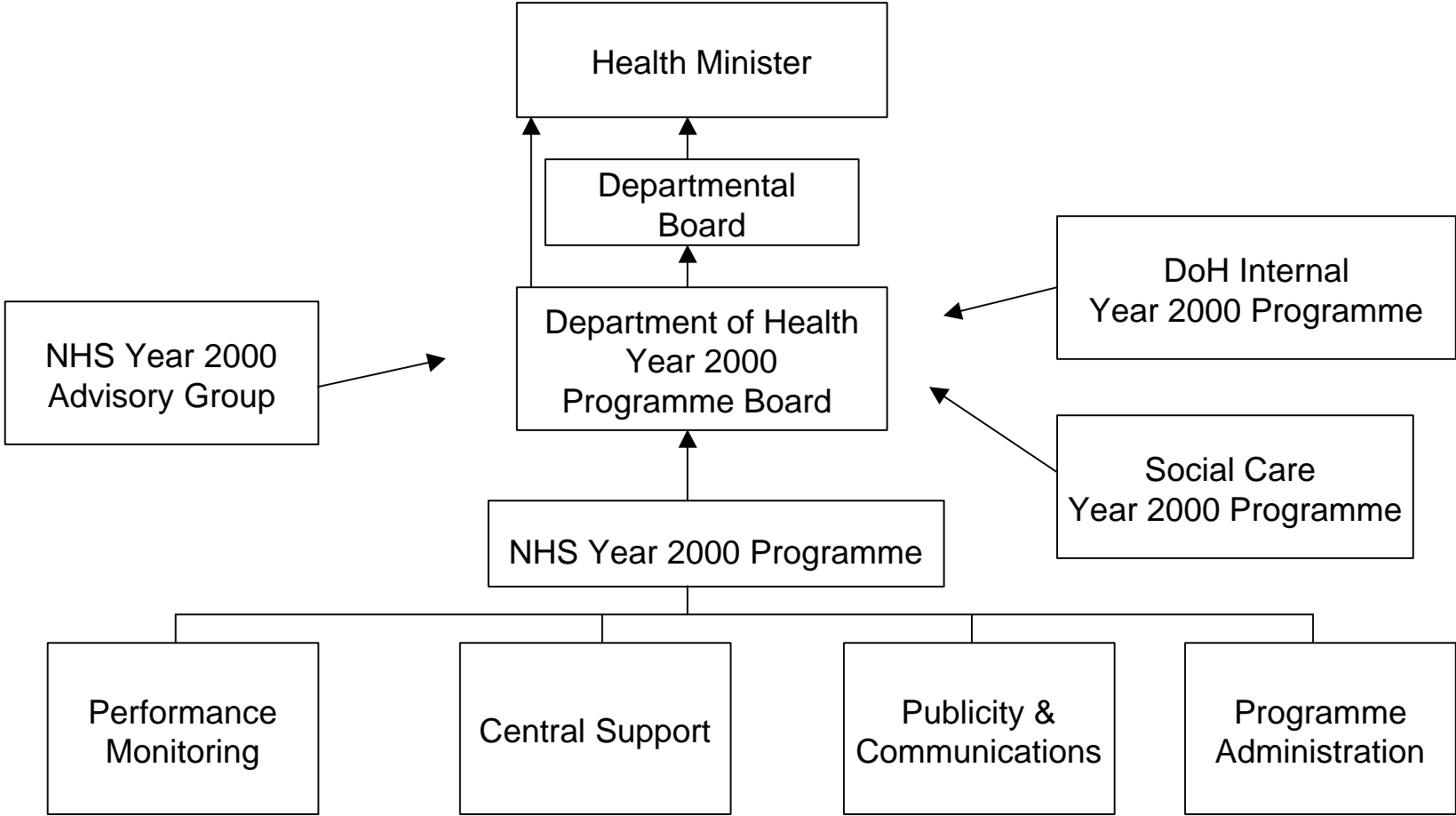
C = Critical, N = Non-Critical

Organisation of the National Health Service

The NHS in England



The NHS Executive Year 2000 Programme



The NHS Y2K Project

NHS Y2K Project Stages

- Starting the Y2K project
- Project Management
- Carrying out the work
- Business Continuity Planning

NHS Y2K Project Stages

- Starting the Y2K project
 - corporate commitment
 - awareness
 - communications
 - overall project plan

NHS Y2K Project Stages

- Ongoing Project Management
 - controls and reporting
 - audit
 - risk management
 - funding & resourcing

NHS Y2K Project Streams

- Estates
- Information
Technology
- Medical Devices
- Supply Chain

NHS Y2K

Examples of potential problems in the Supply Chain

- Water
- Electricity
- Telephone systems
- Medical Gases
- Drugs
- Blood
- Ambulance communications
- Contracts for repair and supply

NHS Y2K Project Stages

- Carrying out the work
 - inventories
 - checking compliance
 - remediation options
 - systems contingency planning
 - supply chain
 - procurements
 - business continuity planning
 - legal liability

NHS Y2K Project Stages

- inventories
- Estates
 - infrastructure, telecommunications, lifts,
- Information Technology
 - computer systems, networks
- Medical Devices
 - all medical equipment, X-Ray, implantable devices
- Supply Chain
 - goods and services; food, drugs, specialist

NHS Y2K Project Stages

- inventories
- collect all available information
involve users and assess
criticality to patient care
5 = life threatening

likelihood of failure

(criticality x likelihood)

NHS Y2K Project Stages

- checking compliance

What do we mean by compliance?

Rule 1 - No value for current date will cause any interruption in operation

Rule 2 - Date-based functionality must behave consistently for dates prior to,

Rule 3 - In all interfaces and data storage, the century in any date must be specified either explicitly or by unambiguous algorithms or

NHS Y2K Project Stages

- checking compliance
 - date aware?
 - contacting manufacturers and suppliers
 - information on World Wide Web
 - study available technical details

what is the nature of the

NHS Y2K Project Stages

- remediation options
 - fix
 - replace
 - is there time?
 - discard
 - plan a work-around
 - if non-compliance does not affect critical functions
- label compliant equipment
- alternative suppliers

NHS Y2K Project Stages

- Business Continuity Planning
 - business process analysis
 - risk assessment
 - continuity and contingency planning
emergency planning

NHS Y2K Project Stages

- Business Continuity Planning
 - business process analysis
 - examine the business plan
 - consider hospital services
 - staff workshops
 - structured questionnaires

Typical Internal and External Threats

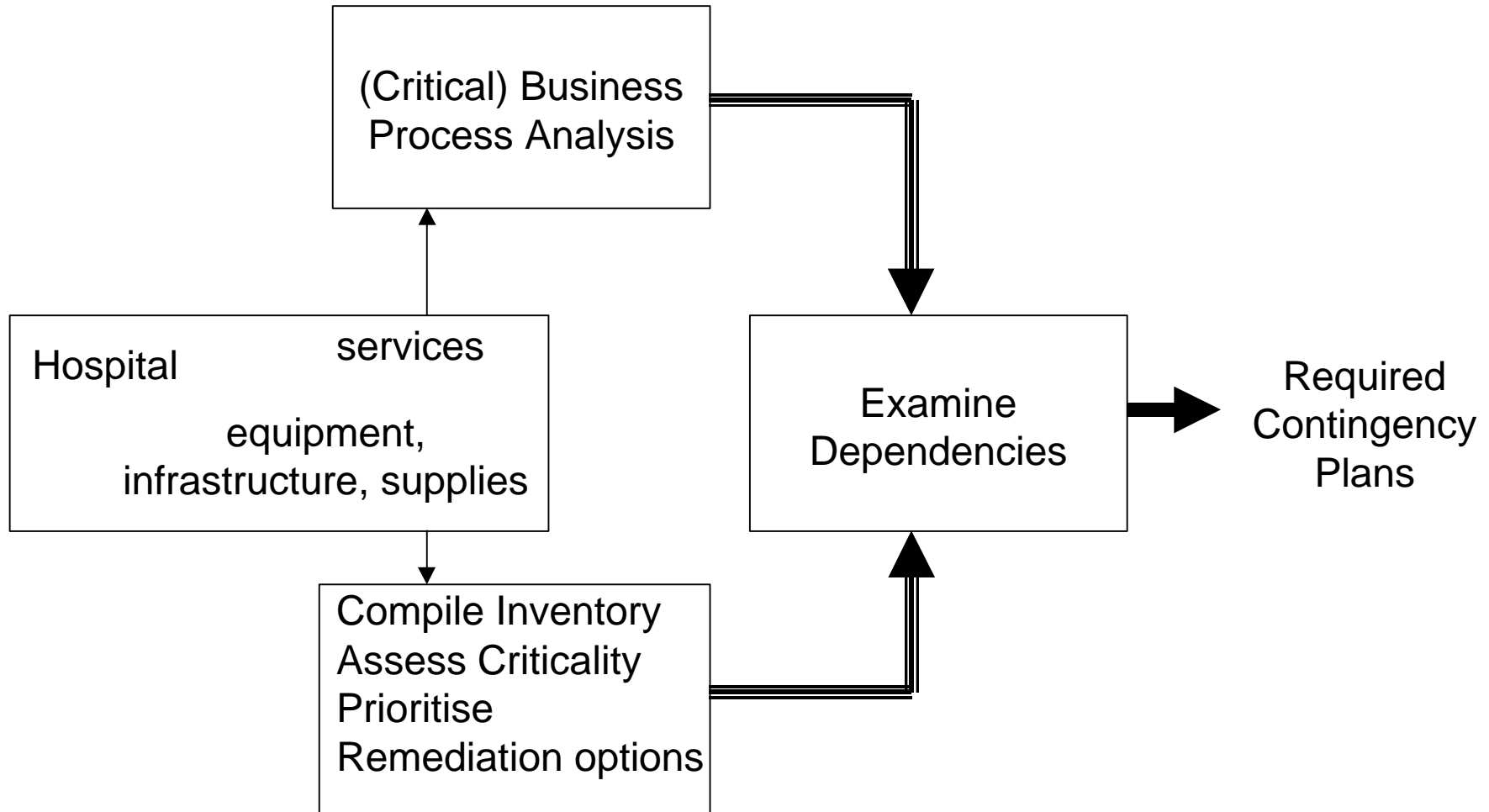
Internal

- equipment failures
- major equipment failures leading to loss of critical services
- failure of electricity supply to one or
- failure of water supply to one or
- internal telephone failure
- computer network failure
- failure of central medical gas supply
- staff absenteeism
- serious weather problems
- delayed discharge of patients

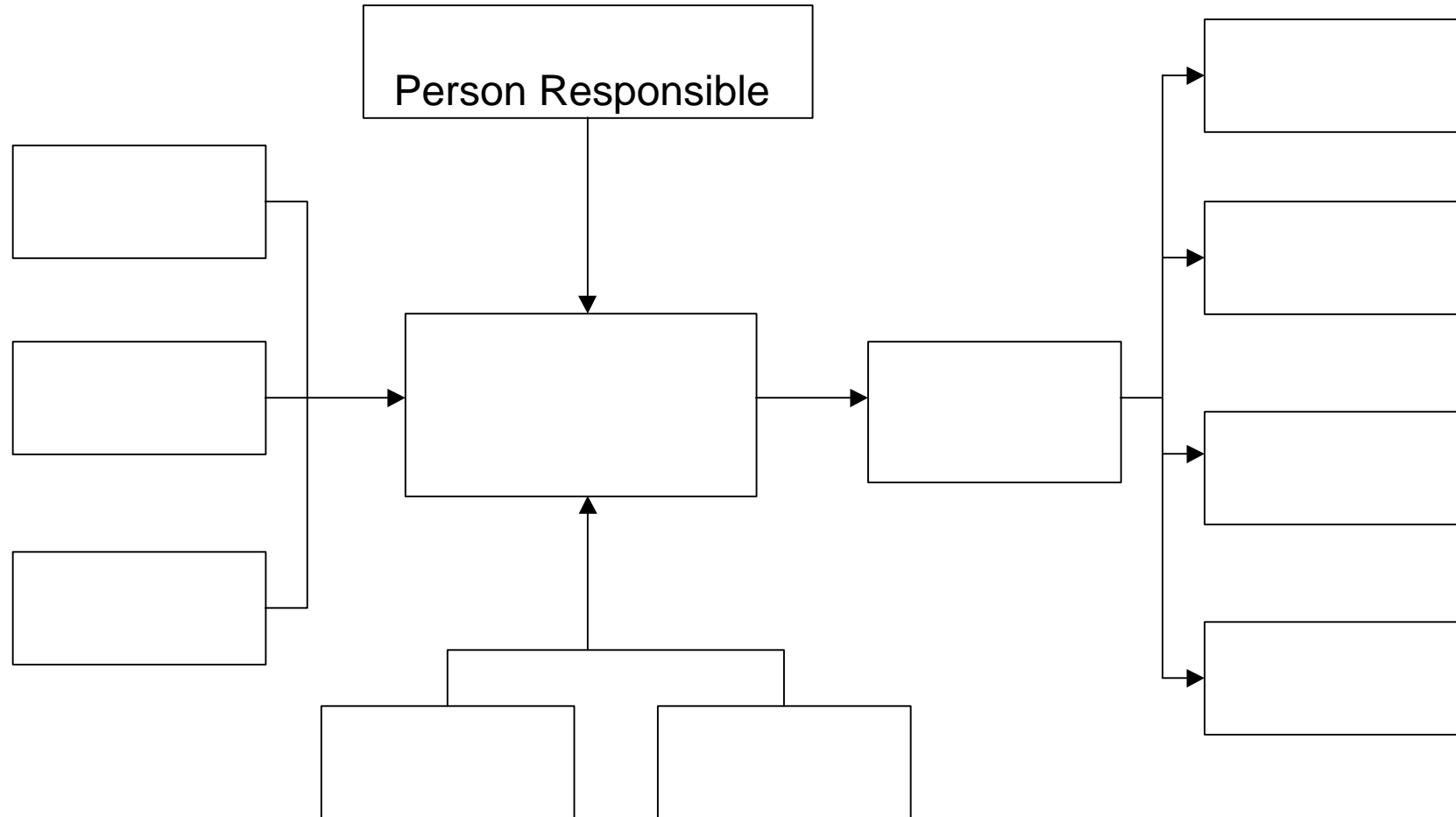
External

- failure of public utilities (electricity, failure of public telephone network failure of critical supplies (drugs, unusual level of demand on services due to serious incident (aircraft accident for example) unusual level of demand due to Y2K specific celebrations other multiple external failures which arise due to Y2K

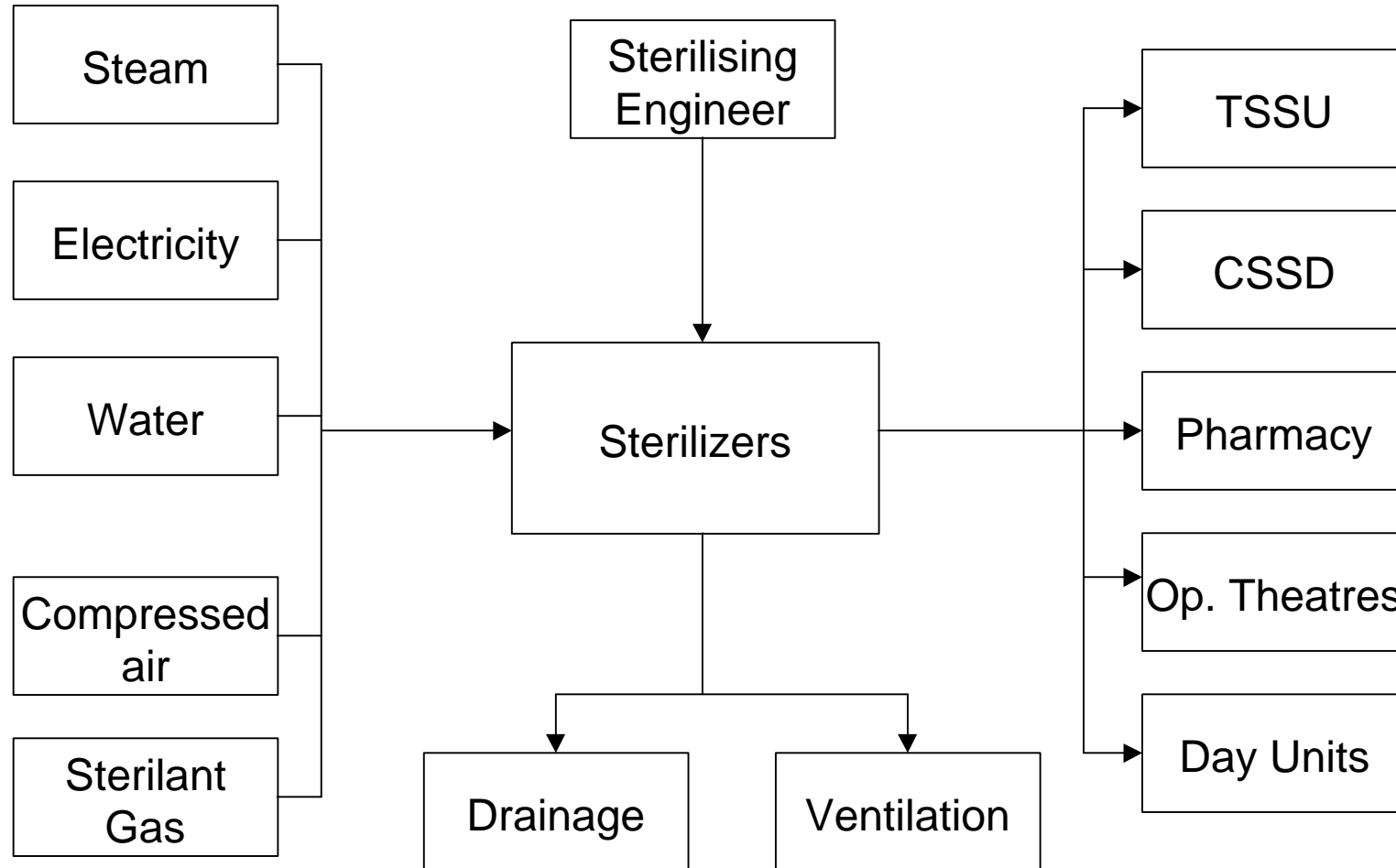
NHS Y2K Project Summary



Dependency Model



Dependency Model



Y2K
&
UK National Health Service

Planning for the Remaining Risk

Planning for the Remaining Risk

- Emergency Plans
- Business Continuity Plans
- Contingency Plans

Planning for the Remaining Risk

Emergency Plans

- plans which deal with events outside our ability to fix or control (Major Incidents)
 - cause numbers or types of casualties that overwhelm or threaten to overwhelm normal services
 - pose a serious threat to the health of the community
 - disrupt the running of the health service

Planning for the Remaining Risk

Business Continuity Plans

- making sure that some agreed minimum level of operation and service will be available even if nothing goes wrong

concentrates on the business and operations of
, should be part of normal
business planning.

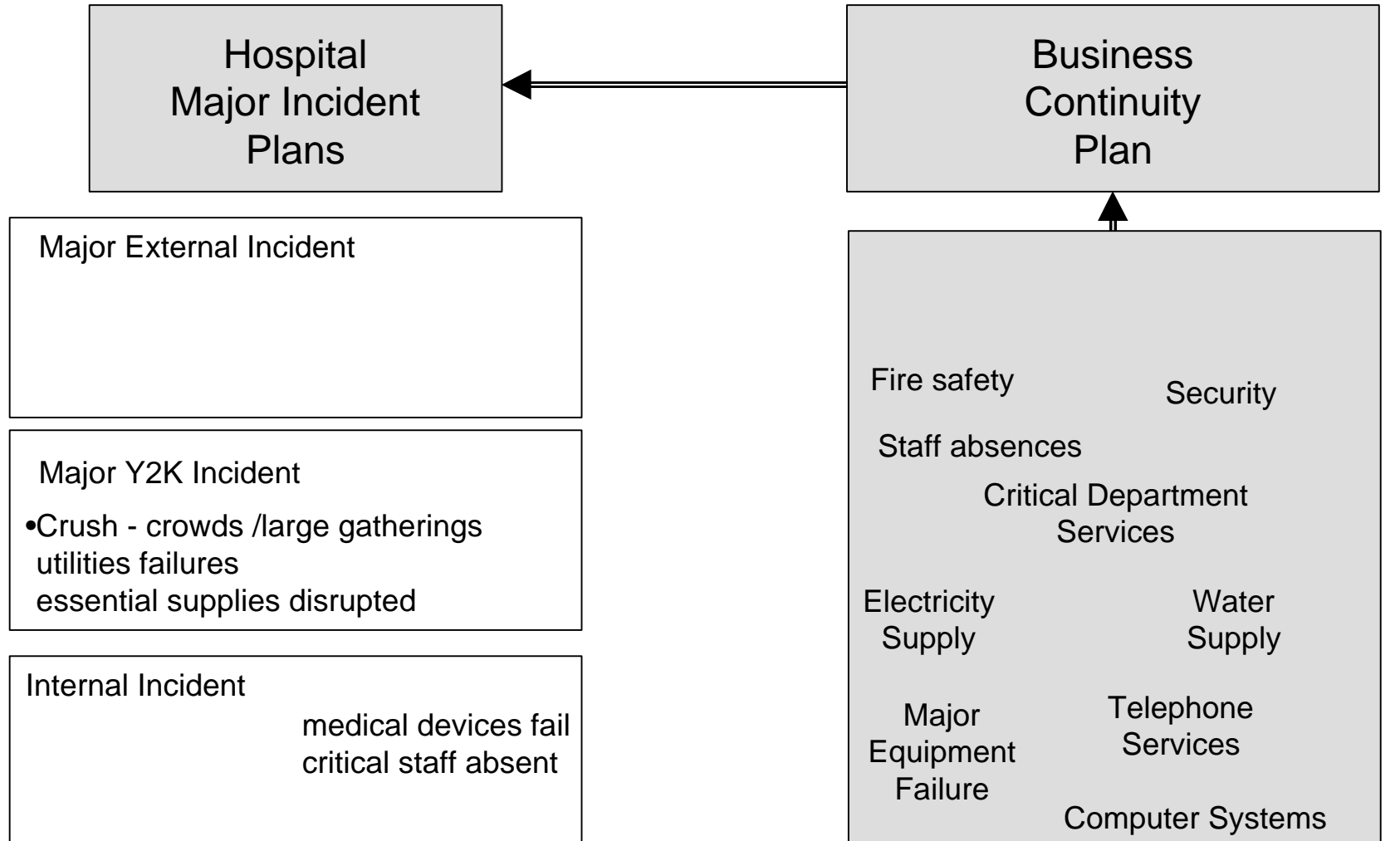
- regular winter pressures
- anticipated flu epidemics
- regular maintenance of equipment to prevent breakdowns

Planning for the Remaining Risk

Contingency Plans

- specific plans to deal with failures in equipment, supplies and services
 - includes ensuring adequate number of staff, with appropriate skills, to implement these plans
 - failure of electricity supply
 - equipment failure in critical department
 - evacuation of patients

Planning for the Remaining Risk



Interdependencies, Internal and External

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Contingency Planning

Contingency Planning

Contingency

- something that may happen at a future date

Contingency Plan

- a plan made in case something happens

Contingency Planning

Key Steps

- Scope
 - internal
 - external
- Gather information
 - take stock of existing plans
- Assemble a team
- Testing and quality assurance
- Documentation and review of plan

Contingency Planning

Essential Features

- Strategy and policies
 - establish maximum period of unavailability, or minimum operational requirement

to invoke a contingency plan

to initiate recovery (end of contingency)

to give authority to people

Availability of information

managing an incident depends on having all relevant information available

Command, Control and Communications

Contingency Planning

Examples of Contingency Strategies

- reduce activity (plan in advance)
 - transfer activity to a different time or place
 - increase spare capacity
 - cancel holidays, change working hours
 - change schedules and timing
 - check stock levels
 - not to stockpile)
- help desk / control centre
- alternative sources
- resilience
- provide backup communications

Contingency Planning

Elements of a plan

- administration
- action

Contingency Planning

Elements of a plan - administration

- 1 objective and scope
- 2 who has authority to invoke the plan
 - what triggers can invoke the plan
 - names, roles, contact details of key staff
 - defined duties, and authority, of key staff
 - duties of other staff and staff groups
 - expected life of the plan
 - review points for relevance of the plan
 - logistics / control

 - mechanisms for informing staff
 - special resource requirements
 - details of those who hold copies of the plan
 - amendment details (version control)
 - contact details of associated

Contingency Planning

Elements of a plan - action

- the action part describes the action and procedures to be taken in each situation, to the level of detail required to ensure there is no confusion
criteria for invoking the plan, the triggers
procedures for invoking the
special procedures for operation in contingency

criteria for returning to normal

procedures for returning to normal

procedures for recovering from contingency

short term actions

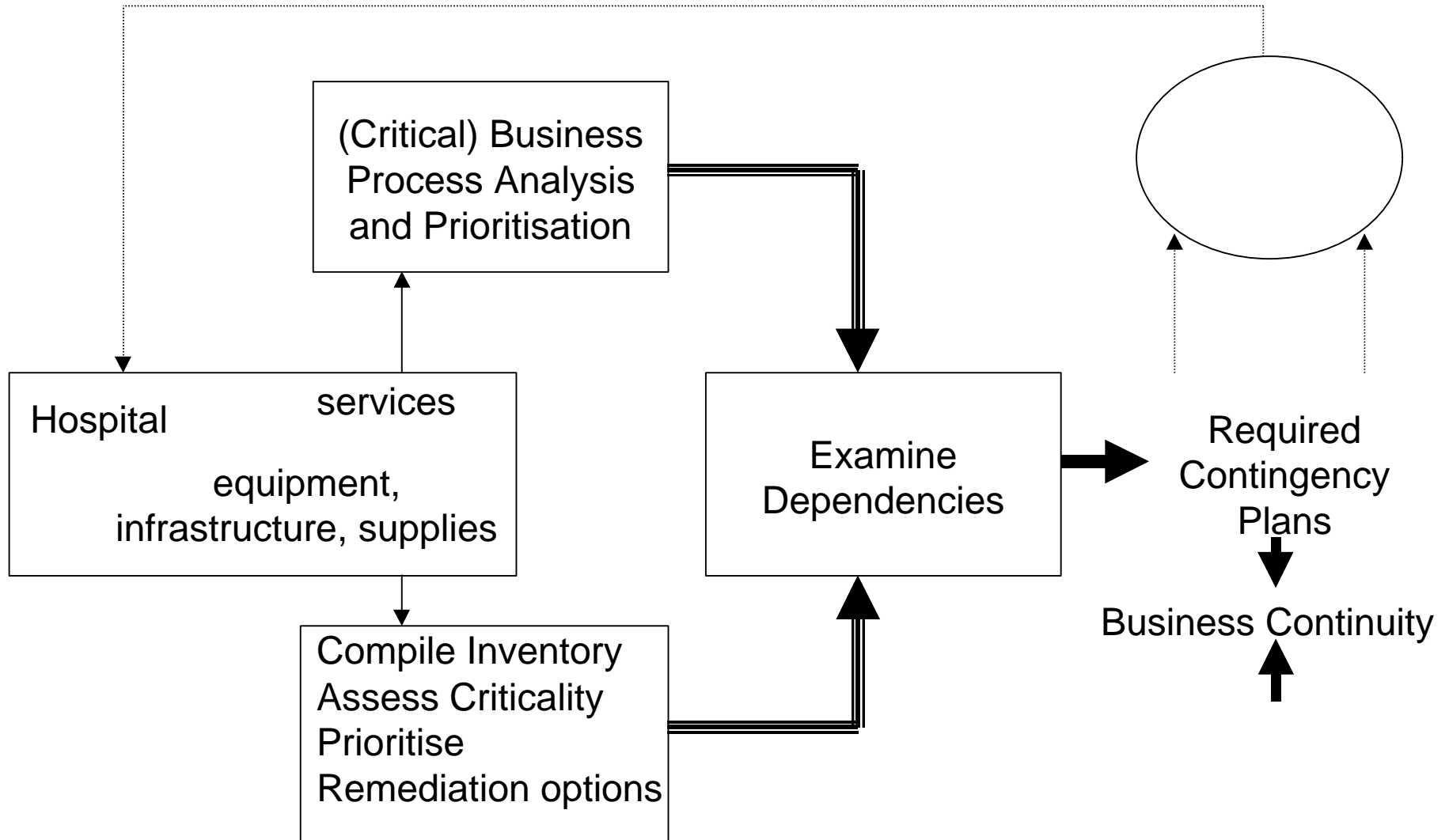
long term actions

practical considerations

accommodation for emergency and normal staff

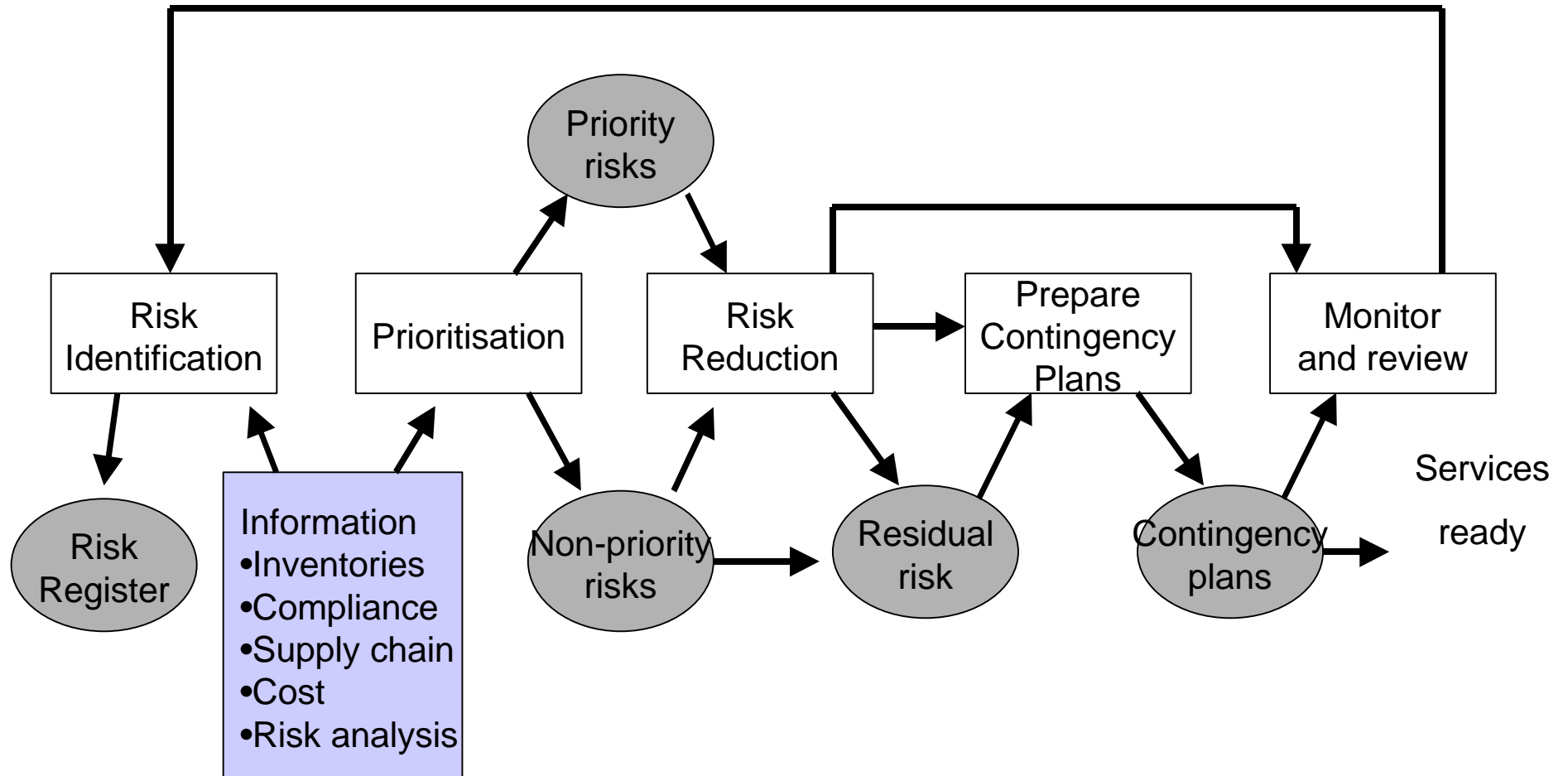
identification of “Incident Manager”

NHS Y2K Project Summary



Managing Y2K Risks

(source: UK Audit Commission)



NHS

YEAR 2000

programme

Help Desk 0121 625 2711

Web site: www.imc.exec.nhs.uk/2000