EUROCONTROL GUIDELINES for CONTINGENCY PLANNING of AIR NAVIGATION SERVICES

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Policy, Operational Concept and Planning Process

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http://www.eurocontrol.int/ses/public/standard_page/sk_sesis_guidelines.html

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Reviewing

ANSP

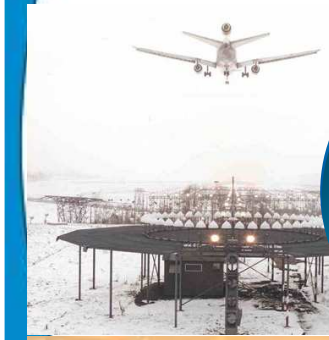
State
Civil & Military
Authorities

Consultation

Airspace Users

Airports

Contingency Process



Application

Planning

- Inventory of Services
- List causes
- Check existing plans
- Plan Contingency measures
- Plan Recovery back to Normal
- Document Contingency plans

Change Management

Policy – General Roles and Responsibilities

- States
  - Annex 11 to Chicago Convention – Chapter 29
  - EC Common Requirements 2096/2005
  - Defines strategic level requirements to ANSPs (through negotiation)
  - Ensures conformity (through NSA)

- NSA
  - Provides necessary oversight (checks conformity v the requirements)
  - Approvals
  - Coordination with other NSAs (as appropriate for the contingency measures)

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Policy – General Roles and Responsibilities

- ANSPs
  - Sets contingency policy based around mandated requirements and own business objectives
  - Defines Operational Concept
  - Detailed Planning leading to development of contingency measures
  - Ensures preparedness
  - Executes plans, as and when necessary
  - Take follow up action
  - Coordination – State, NSA, ANSPs, Airports, Users
- Airports
- Airspace Users

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Policy – General Considerations

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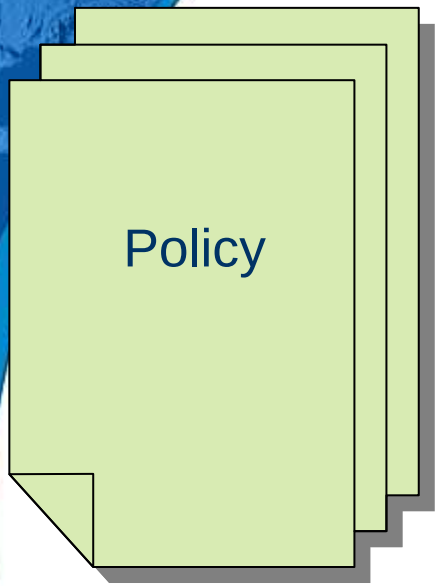
Policy – ANSP Considerations



- Policy for Contingency or Statement of Intent
- Scope – Safety critical and/or Service Continuity
- What type of Services. All or only some?
- Timeframe
- Culture – integrated or stand alone?
- Business and Risk Management.

- Policy and/or Statement of Intent feeds the ANSP's Operational Concept of Contingency

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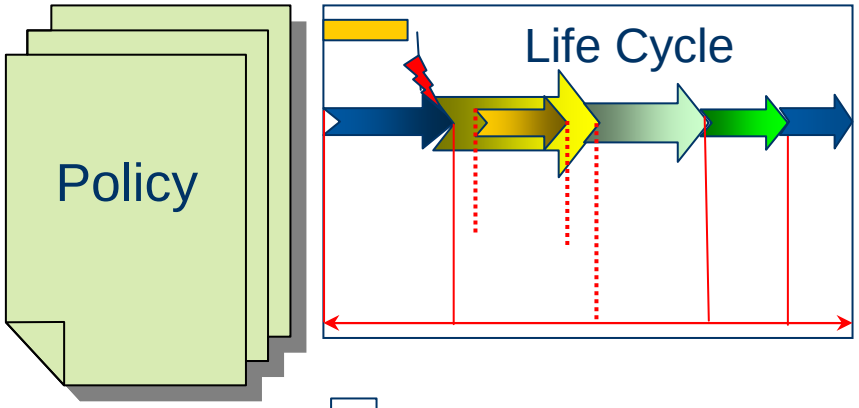
Operational Concept - Elaboration



Operational Concept

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Operational Concept - Elaboration

EUROCONTROL Guidance for Design of Contingency Strategies

(based on 'Current Practices' and Common Failure Modes Considerations)

in support of EUROCONTROL Guidelines for Contingency Planning of Air Navigation Services

Policy

Life Cycle

Operational Concept

State (Rule-maker)

Consultation

ANSP

Airspace Users & Airports

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Operational Concept – Requirements - Planning

Operational Concept

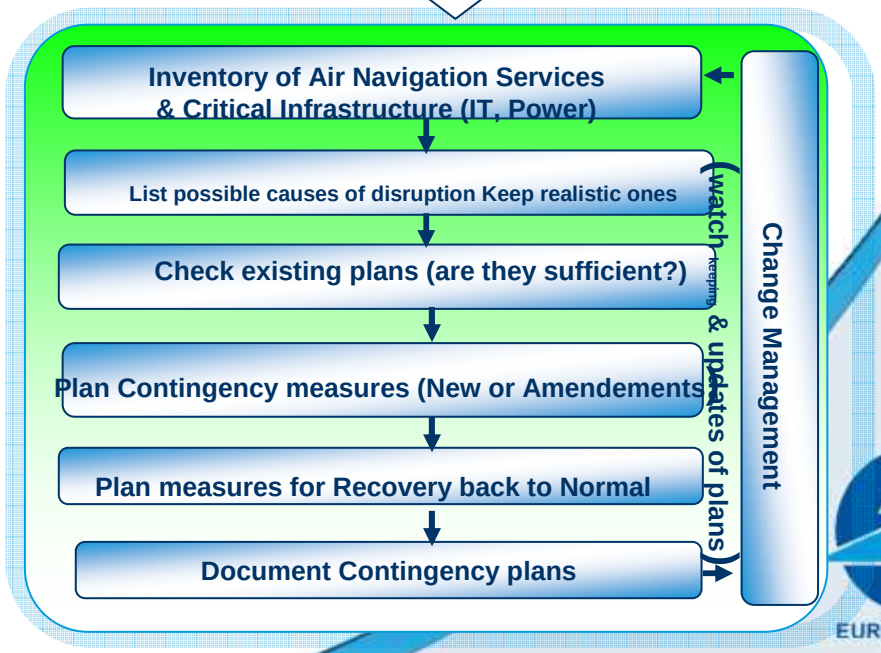
Requirements

Safety,

Security,

Capacity,

Environment



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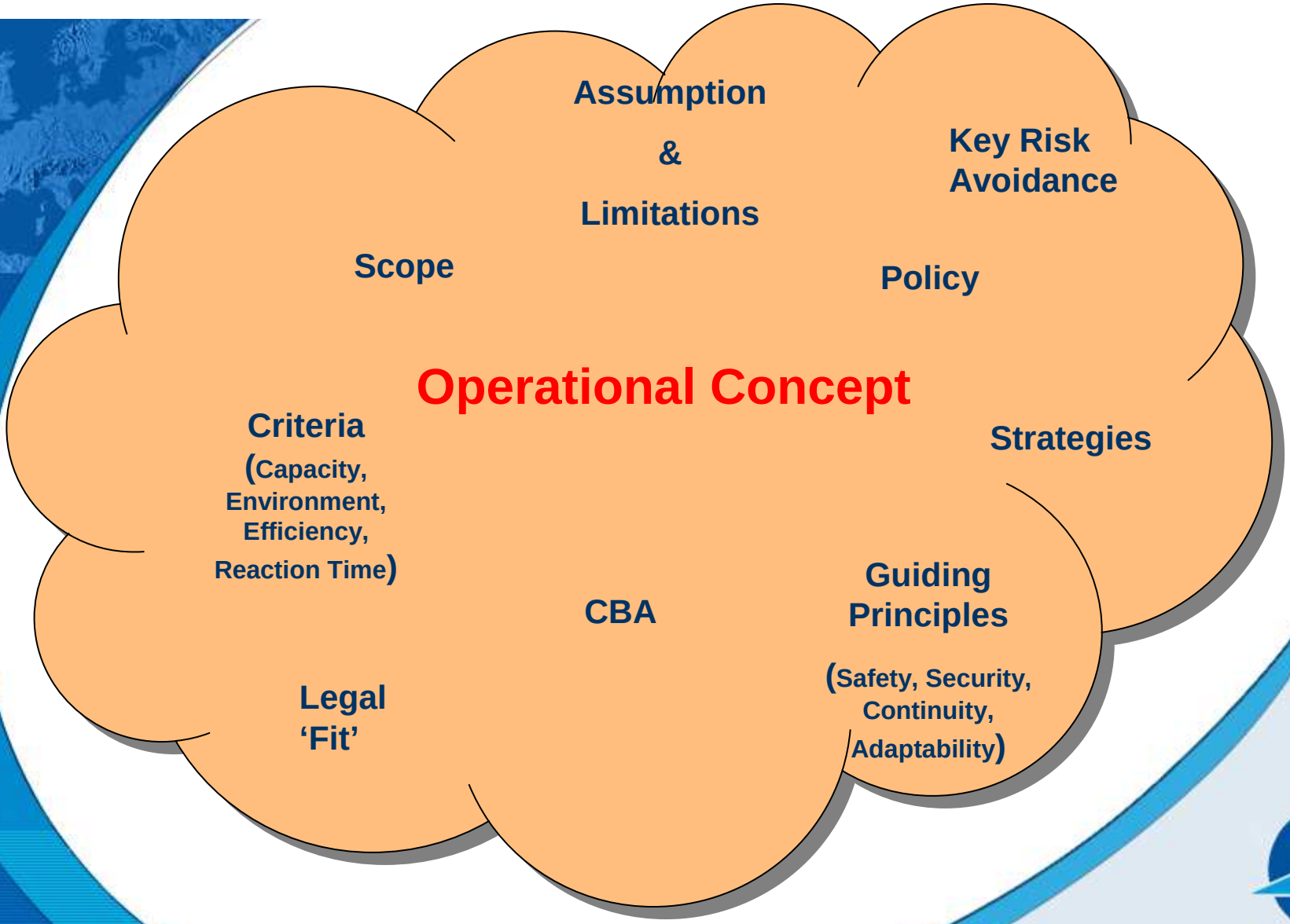
Operational Concept – What's Inside?



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Operational Concept – Rationale and Benefits

- Common language
- Avoid misunderstandings.
- Supports definition and implementation processes.
- Sets safety, security and performance criteria.
- Safety and Security risk assessment;
- Supports Business case;

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Operational Concept – Describe Current Contingency Arrangements

- Functional description
- Different modes of operation
- Built-in Resilience and redundancy
- Interfaces with external world
- Involved personnel
- Performance Criteria
- Quality, safety, security standards

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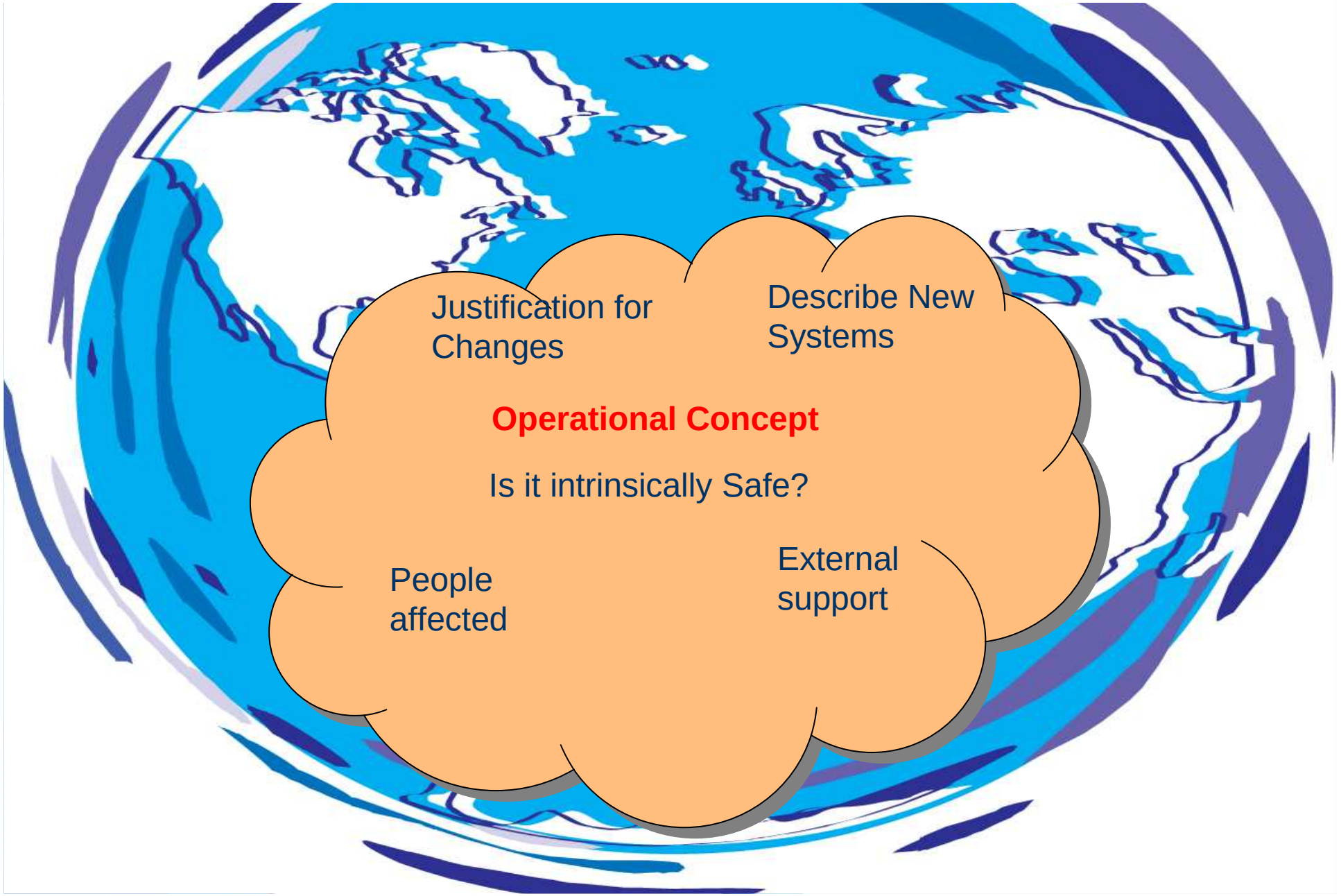
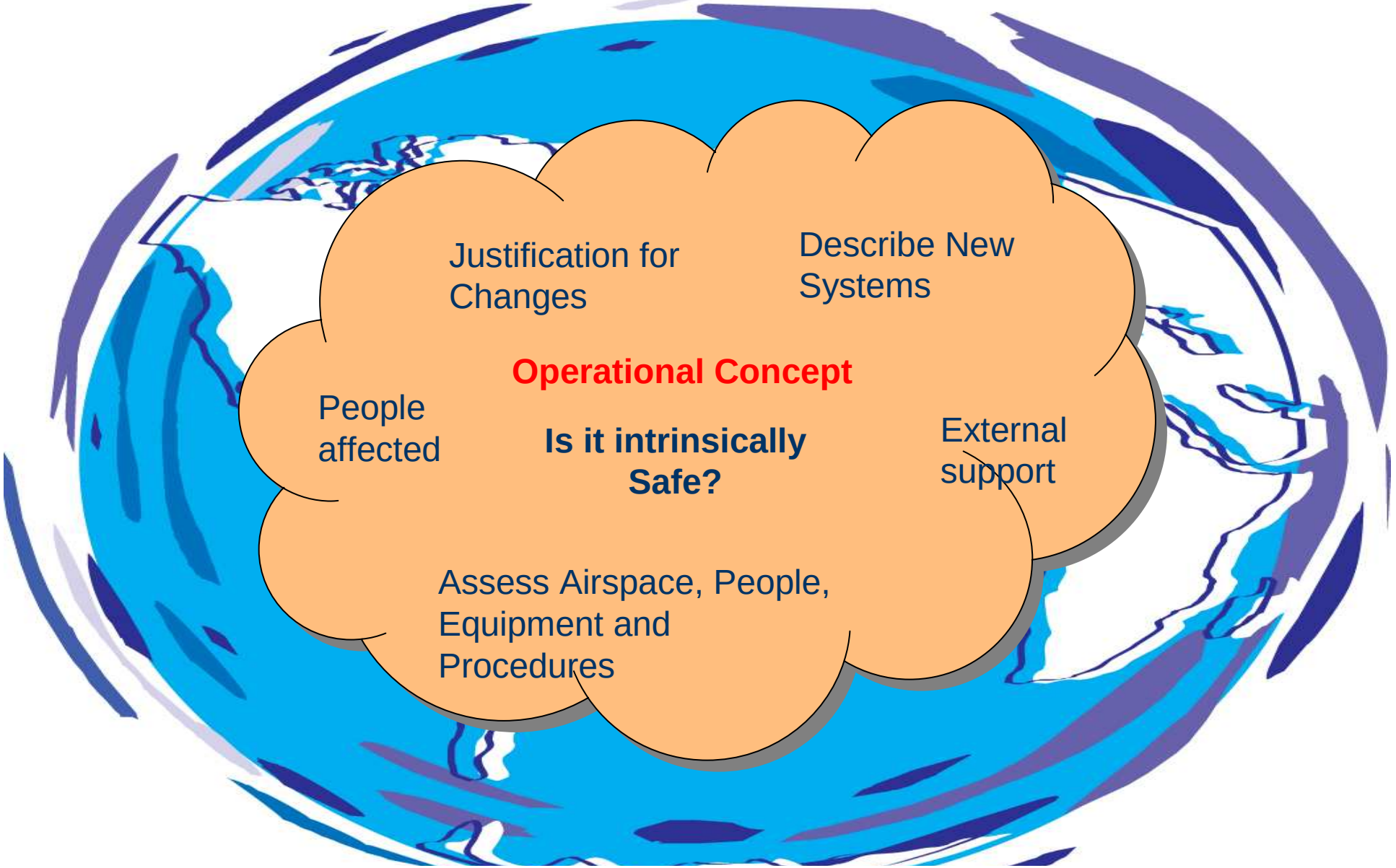
Operational Concept – New Environment

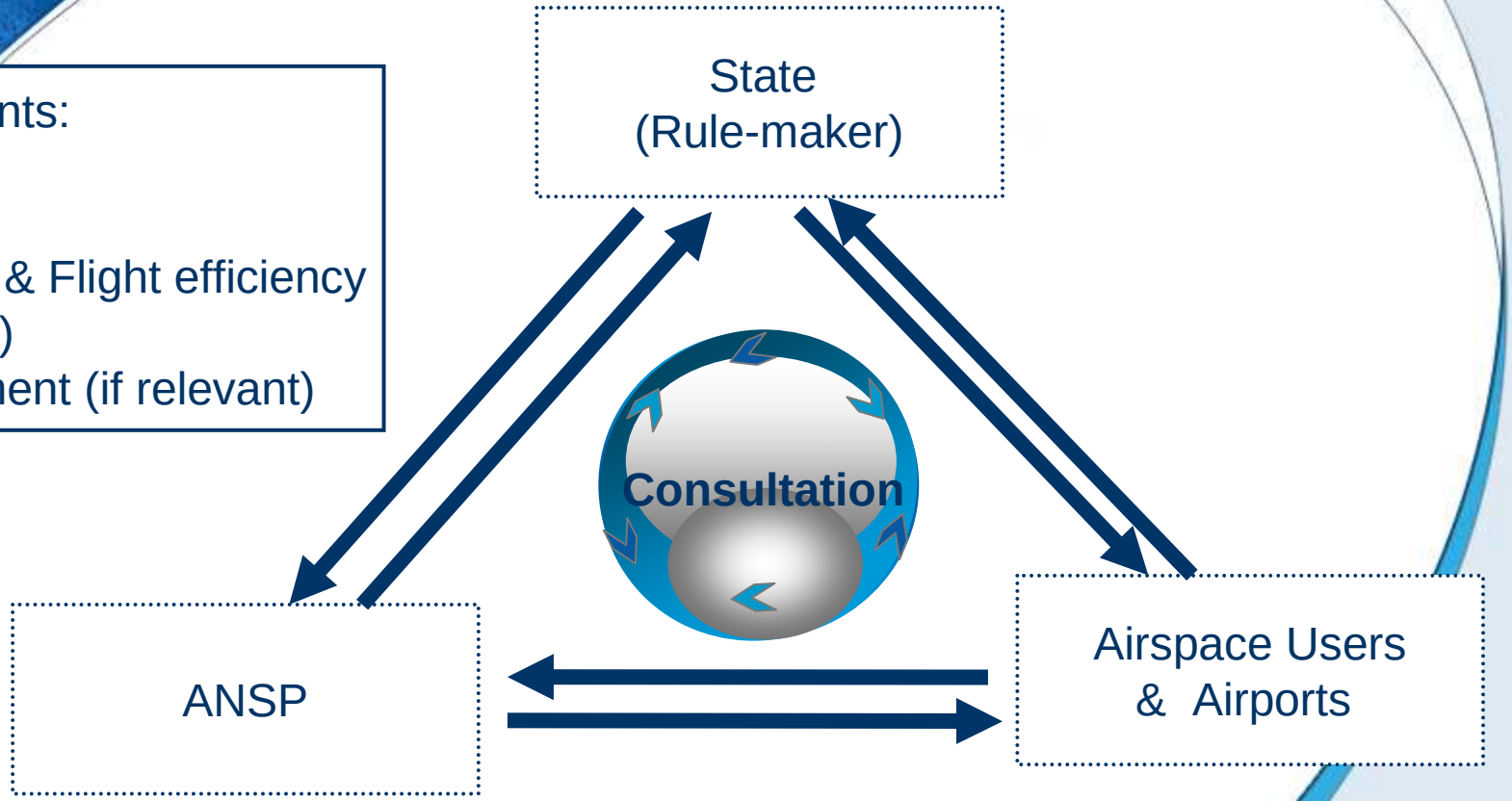


Operational Concept
Pros and Cons – Measure Changes, Old versus New



Policy – Setting the Requirements of Contingency

Requirements:
- Safety
- Security
- Capacity & Flight efficiency (if relevant)
- Environment (if relevant)



Discussion on:
- Level of Capacity & Flight efficiency provided during contingency situations

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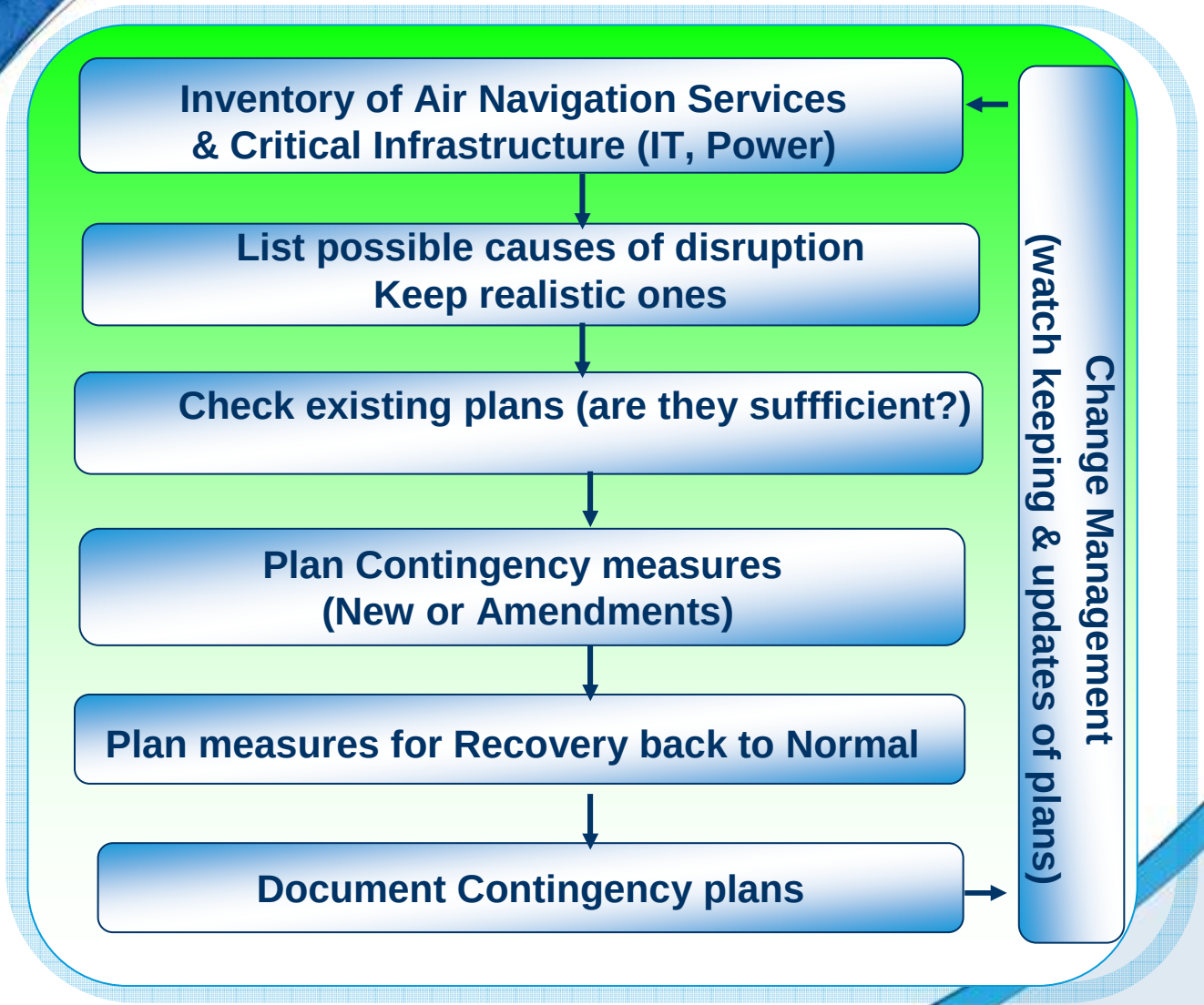
Generic Contingency Planning Process



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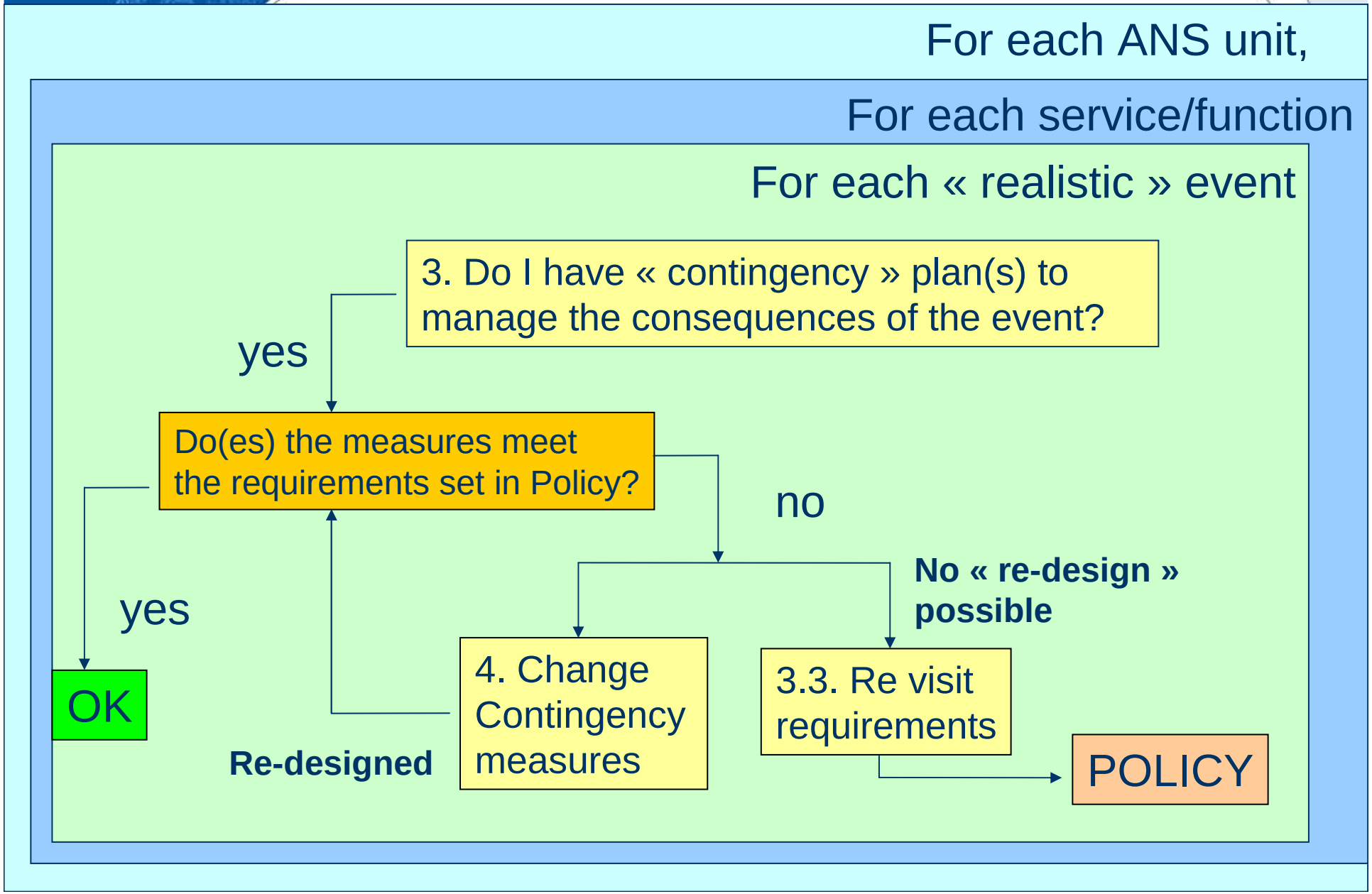
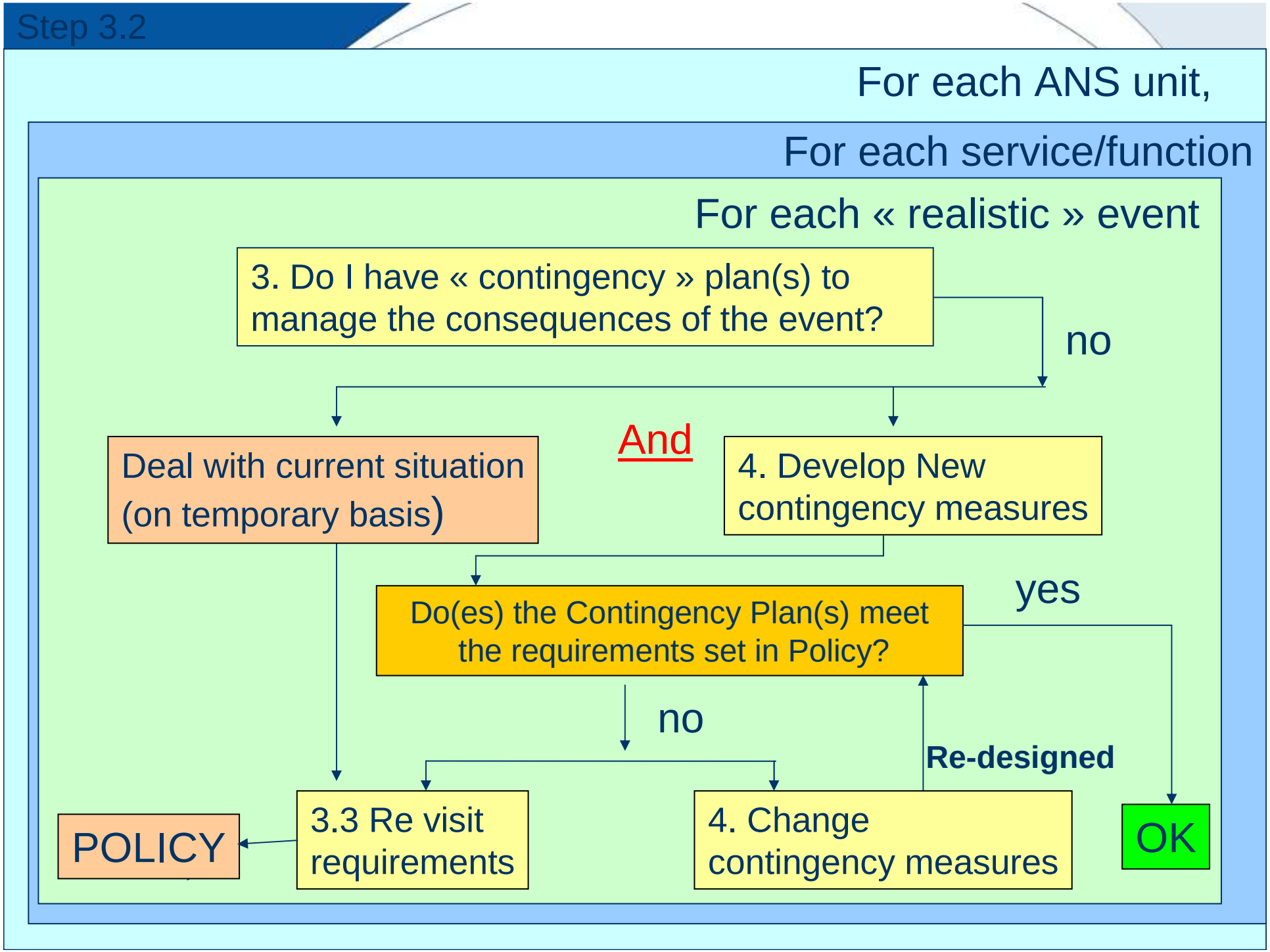
Step 3.1


For each ANS unit,
For each service/function
For each « realistic » event
3. Do I have « contingency » plan(s) to manage the consequences of the event?
yes
Do(es) the measures meet the requirements set in Policy?
no
yes
OK
4. Change Contingency measures
Re-designed
No « re-design » possible
3.3. Re visit requirements
POLICY


For each ANS unit,
For each service/function
For each « realistic » event
3. Do I have « contingency » plan(s) to manage the consequences of the event?
no
Deal with current situation (on temporary basis)
And
4. Develop New contingency measures
Do(es) the Contingency Plan(s) meet the requirements set in Policy?
yes
no
Re-designed
POLICY
3.3 Re visit requirements
4. Change contingency measures
OK

Step 4

For each ANS unit,

For each service/function,

For each «realistic» event

Do I have a Plan to manage the consequences of the event?

A Plan may consist of procedures to cover:
- Emergency mode,
- or Emergency mode and Degraded mode;
- or only Degraded mode

Based on the safety/security criticality of the service/function;

In addition, driven by « business/corporate » considerations,
a Plan may include « Service continuity » Strategies

Step 4

For each ANS unit,

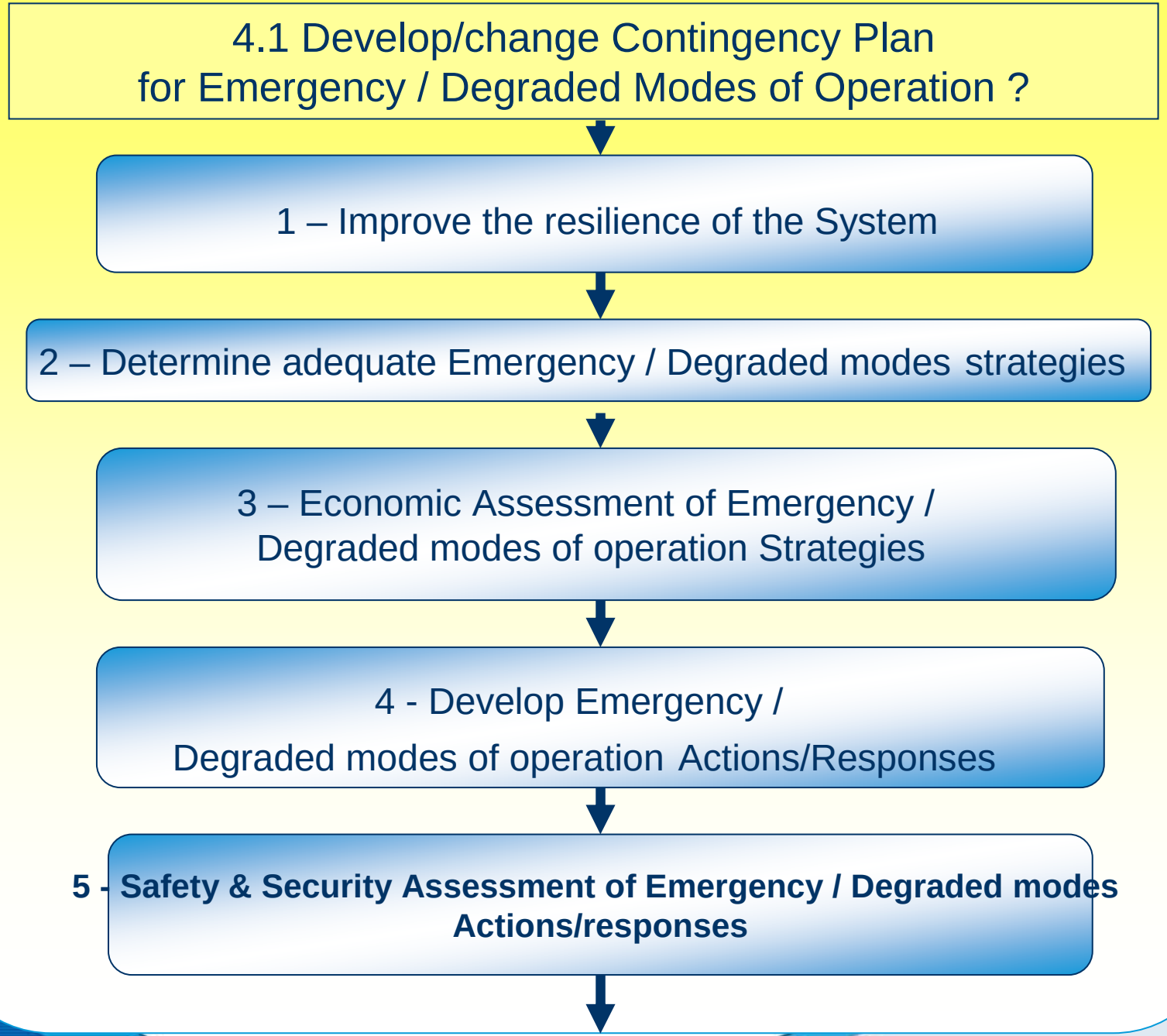
For each service/function,

For each «realistic» event

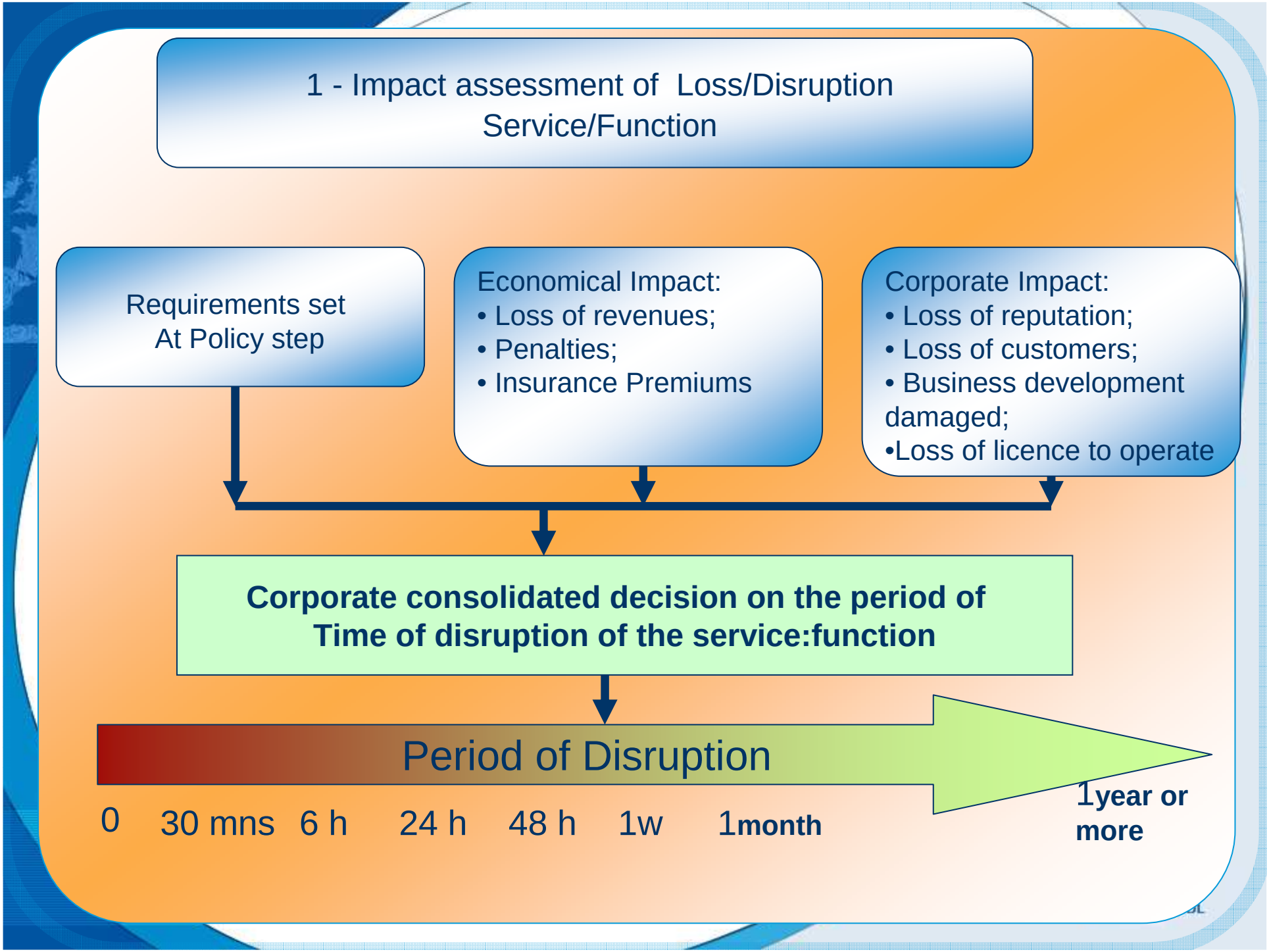
4. Develop/Change procedure ?

4.1 Develop/Change Procedure for Emergency/Degraded mode (as relevant)

4.2 Is there a need to develop/change strategies for Service continuity ?


4.1 Develop/change Contingency Plan
for Emergency / Degraded Modes of Operation ?
1 – Improve the resilience of the System
2 – Determine adequate Emergency / Degraded modes strategies
3 – Economic Assessment of Emergency /
Degraded modes of operation Strategies
4 - Develop Emergency /
Degraded modes of operation Actions/Responses
5 - Safety & Security Assessment of Emergency / Degraded modes
Actions/responses


4.2 Is there a need to develop/change Contingency Plan for Service Continuity ?
1 - Impact assessment of loss/disruption of service/function
2 – Is there a need for Service Continuity ?
3 – Determine Service Continuity STRATEGIES
4 – Economic Assessment of Service Continuity Strategy
5 - Develop Service Continuity Actions/Responses
6 - Safety & Security Assessment of Service Continuity Actions/responses


1 - Impact assessment of Loss/Disruption Service/Function
Requirements set At Policy step
Economical Impact:
• Loss of revenues;
• Penalties;
• Insurance Premiums
Corporate Impact:
• Loss of reputation;
• Loss of customers;
• Business development damaged;
•Loss of licence to operate
Corporate consolidated decision on the period of Time of disruption of the service:function
Period of Disruption
0
30 mns
6 h
24 h
48 h
1w
1month
1year or more

B) ii – Each “realistic event” in term of **“likely duration of the Loss/disruption of service”** is mapped against the **PD of the service/function**

PD (Service/function)

“Service Continuity strategy” area

No need for Service Continuity Strategy

Potential need for Service Continuity Strategy

T0 **Event related Likely duration of loss/disruption**

If any event leads to a « Likely duration of disruption » longer than PD, there is a potential case for developing a « Service Continuity strategy »

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End of Presentation

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