# ARMS Terminology

- This is a <u>working document</u> about the definitions used by the ARMS WG and the rationales behind them.
- These definitions fit the ARMS methodology
- The actual definitions are in **bold**, the rest is explanation.

### Open items:

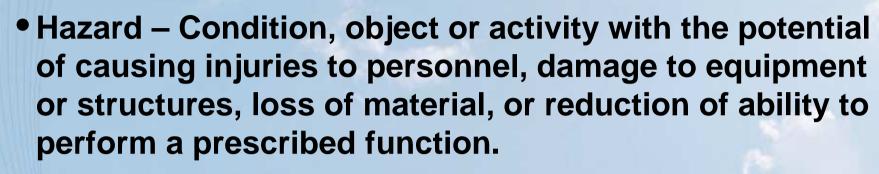
- Ironically, we still want to check if we could find a RISK definition which could fit as such, instead of the current modified ICAO definition.
- We may have to make a small grammatical change to the Undesirable Event definition, to clarify the chronological aspect.

2008-J.Nisula/Airbus Page 1

# Terminology

- Risk The assessment, expressed in terms of predicted probability and severity, of the consequence(s) of hazard(s) taking as reference the <u>potential</u> outcomes.
  - No common definition even in aviation (to be mentioned)
  - Virtually identical to the ICAO SMS course definition
  - Replaced the "worst foreseeable situation" with "potential outcomes" (important aspect for the methodology)
  - In both cases, the main point is that the risk study is not limited to the observed <u>actual</u> outcomes.
  - The word "assessment" is not perfect; "possible harm" would be more appropriate.
  - Need to explain "potential"
  - Replaced "a hazard" by "hazards" to allow Safety Issues as objects
  - Could add "context specific"?

2008-J.Nisula/Airbus Page 2



No changes (vs. ICAO)

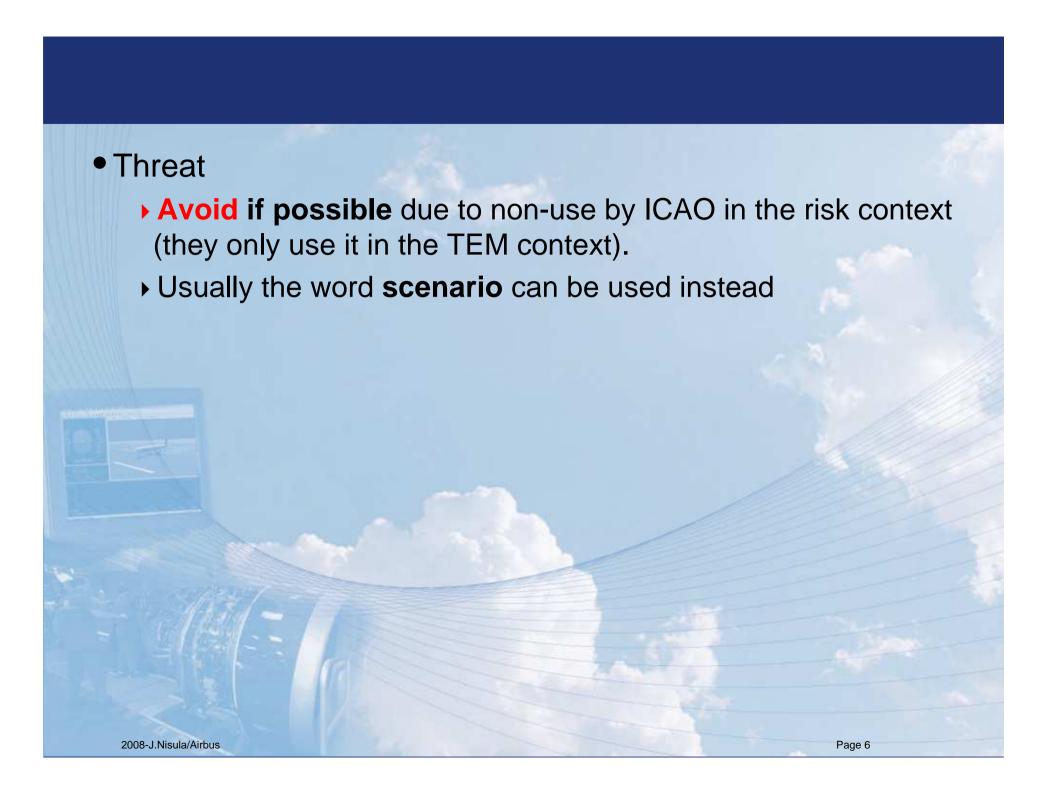
2008-J.Nisula/Airbus

Page 3

## Safety Issue

- "Safety Concern" not acceptable. "Issue" more tangible, real, present, identified through a process.
- Safety Issue is a manifestation of a hazard or combination of several hazards in a specific context. The Safety Issue has been identified through the systematic Hazard Identification process of the organization. A SI could be a local implication of one hazard (e.g. de-icing problems in one particular aircraft type) or a combination of hazards in one part of the operation (e.g. operation to a demanding airport).





## Mitigation

- Conflict of definitions: classic = post-accident, ICAO = all risk controls (prevention, recovery, mitigation)
- Mitigate To make milder, less severe or less harsh
  - ▶ This supports more the classic meaning of mitigation (post-accident)
- Mitigation Measures to address the potential hazard or to reduce the risk probability or severity. (ICAO)
- AVOID if possible, use "controlling risks" and "reducing risks" instead.

2008-J.Nisula/Airbus



- Barrier
- Protection
- Defense
- All synonyms
- Encourage use of first two: risk control, barrier. Do not use "safety barrier".

2008-J.Nisula/Airbus

Page 8



- A stage in the escalation of an accident scenario where the accident will occur, unless an active recovery measure is available and is successfully used. Risk Controls prior to UE are part of Avoidance and post-UE are part of Recovery.
  - The underlying model needs to be explained.

2008-J.Nisula/Airbus

Page 9