**Simulation-Based Training**

**General Guidelines**

1. **Identifying** where simulation is appropriate or essential.
2. **Understanding** the training needs and requirements.
3. **Defining** instructional design such as performance measurement and feedback must be embedded within the simulation.
4. **Creating** crafts scenarios based on guidance from the learning outcomes.
5. **Creating opportunities** for assessing and diagnosing individual and/or team performance within the simulation.
6. **Guiding the learning.**
7. **Focusing** on cognitive/psychological simulation fidelity.
8. **Forming a mutual partnership** between subject matter experts and learning experts.
9. **Ensuring that the training program worked.** [2]

**Guiding Principles**

When designing and conducting exercises, there are certain guiding principles that should be observed:

- Set clear, realistic and measurable objectives for an exercise.
- The thrust of exercising is to improve - not to impress.
- Simpler, more frequent exercises lead to faster improvements initially.
- Do not tackle complex exercises until personnel are experienced and competent.
- Too many activities and participants can overcomplicate an exercise.
- Evaluating the exercise successfully is as important as conducting it successfully.
- Planning and conducting a successful exercise is a significant accomplishment.
Planning Process Step by Step

Exercice planning consists of four separate activities - design, develop, conduct and review - that collectively describe the process for creating and running realistic and successful exercises. The process is defined as follows:

1. **Design**: the design phase sets the objectives and scope and approval sets out the timetable necessary for completion.
   - Appoint coordinator
   - Set objectives
   - Determine scope
   - Establish plan
   - Set the date

2. **Develop**: the development phase describes those steps that are taken to create the exercise and prepare and organize fully for exercise activities.
   - Establish coordination /initiate Steering Group
   - Develop scenario
   - Finalize plans

3. **Conduct**: The actual conduct of the exercise activity consists of initiating and maintaining the exercise by simulating, monitoring, controlling and facilitating activities to ensure that the exercise remains within the design parameters. It also involves documentation of the participants' activities and termination of the exercise.
   - Brief participants
   - Initiate play
   - Maintain exercise
   - Evaluate activities
   - Terminate play

4. **Review**: The review phase consists of collecting and analysing data, documenting findings and recommendations for improvement and ensuring information is fed back to management or people concerned. As the activity plan is revised and updated, the exercise programme is similarly adjusted to take into account the lessons learned from prior exercises.
   - Collect data
   - Analyse events
   - Report findings
   - Make recommendations
   - Effect improvements