e-BUDDI Overview
Why Distributed Simulation (DS)?

• Virtual reality simulation and e-learning applications consistently shows improvement in learning outcomes\(^1\)

• Lightweight, portable and self-contained solution\(^2\)

• ‘Good Enough’ simulation for effective training and procedural skills\(^2\)

• Ideally suited for quick response f2f augmented **customised** healthcare training

\(^1\) Schreuder et al, Med Teacher, 2011; Cook et al, JAMA, 2011; 
\(^2\) Kneebone et al, 2010
Why Game Enhanced DS?

• A balanced combination between challenge and learning

• Theory of deliberate practice with intentional repetitive training\(^3\)

• Improve visuospatial and attention skills\(^4\) to deal with Risks and Hazards

Implementation Overview

Mapping Learning and Game Mechanics
Instructional Learning

- Storyline introduction
- Pre-rendered Videos
- Raising Awareness

See Video Clip – SDC 2
Discovery based learning

- Selection choices
- Ability to respond as per local content
- Improve Awareness

Sample Video Clip – SDC3
Guided Tutorials

• Cascading Information
• Step-by-Step
• How and Why?

See also Sample Video Clip – SDC4
Intentional Repetition

- Using Behavioral Momentum
- Multiple attempts to Progress
- Restart on fail and reinforcement
Problem Solving Activity

- Risk Identification and mitigation
- Hazard perception (5 random hazards)
- Capturing events and elimination
Continuous feedback

- Checklists
- Prompts
- Summary
Local Customisation

• Easy to add multiple languages

• Local Voiceovers

• Adaptability to local conditions – Battery dependence