eXercise Guidance Method

TNO
dirk.stolk@tno.nl
erik.vullings@tno.nl

XGM

1 Initiation

- Compose XMT
- Describe scope and context
  - Identify applicable situations
  - Identify involved organisations
  - Identify relevant capabilities
  - Identify nature of the problem
- Determine stakeholders
  - Identify relevant end-users
  - Identify relevant industry/RTOs
  - Identify relevant authorities
- Execute problem analysis
  - Specify the gaps in detail
  - Identify improvement needs
  - Describe the ideal situation
- Define solutions
  - Identify potential solutions
  - Select solutions
  - Specify selected solutions
- Specify exercise objectives
- Determine planning
  - Define milestones
    - Determine dates
    - Determine locations/facilities
  - Risk management
  - Determine communication plan

2 Preparation

- Determine constraints
  - Identify domain constraints
  - Identify cost & time constraints
  - Identify safety and security constraints
  - Identify ethical, legal and societal constraints
  - Identify technical constraints
- Determine performance criteria
  - Collect criteria
    - Provide mission criteria
    - Provide solution criteria
    - Provide exercise criteria
  - List SMART KPIs
  - Draw up the data collection plan
  - Decide on technical means
- Develop playbook
- Design scenario
  - Define core elements
    - Describe typical circumstances
    - Decide on roles
    - Describe technical support
    - Describe non-technical support
    - Describe facility needs
  - Write script
    - Provide synopsis
    - Decide on sessions
    - Define outline
    - Enrich the script
    - Review and finalise script
- Set up technical environment
  - Select and specify technical means
  - Design technical infrastructure
  - Integrate ICT tools with the TTI
- Create physical environment
- Determine staffing and participants
  - Staffing Exercise Board
    - Approach domain experts
    - Approach specific scientists
  - Decide on participants
  - Process ethical, legal issues
- Develop supporting materials
  - Design domain specific materials
  - Design other required materials
- Develop documentation
- Implement and testing
  - Technical implementation
    - Scenario implementation
    - Check technical functioning
    - Perform reality check
  - Ensure and check overall integration

3 Execution

- Conduct test-run
  - Arrange test-run
    - Invite participants
    - Host test-run
    - Liaise with practitioners
    - Methodological set-up
    - Technical set-up
  - Perform test-run
  - Evaluate test-run
    - Assess domain-specific aspects
    - Assess methodological aspects
    - Assess technical support aspects
    - Assess facilitation aspects
    - Ethical and legal review
    - Decide on corrective actions
- Perform required corrections
  - Solve domain-specific issues
  - Solve methodological issues
  - Solve technical support issues
  - Solve facilitation issues
  - Solve remaining issues
- Take go/no-go decision
- Arrange exercise
  - Invite end-user participants
  - Recruit participants
  - Send pre-information
  - Finalise technical support
  - Finalise facility management
- Conduct exercise
  - Make final preparations
  - Introduce the exercise
    - Inform of purpose and goal
    - Inform of ethical/legals issues
    - Inform of logistics, safety and security
    - Instruct participants on their roles
    - Provide technical instructions
  - Run scenario
    - Introduce scenario sessions
    - Execute scenario sessions
    - Support scenario running
    - Collect and store data/feedback
      - Debrief end-user players
      - Debrief observers
      - Store technical data
      - Store multimedia
  - Close the exercise
    - Arrange hot wash-up
    - Discuss end-user perspective
    - Provide initial conclusions

4 Evaluation

- Validate and structure data
- Analyse results
  - Assess domain-specific performance
  - Assess solution-specific performance
  - Evaluate exercise
    - Assess fulfilment objectives
    - Evaluate end-user contributions
    - Evaluate scientific approach
    - Evaluate facilities
    - Evaluate technical support
  - Identify lessons learned
- Reporting and dissemination
  - Provide domain-specific input
  - Provide scientific input
  - Disseminate internally
  - Disseminate within end-user domain
  - Disseminate within scientific domain

Legend of responsibilities

- Exercise manager
- Problem owner
- Research leader
- Host
- Technical support leader

STRATEGY
Interoperability for crisis management

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