A taste of wargaming

TNO - Dutch MoD "*connections*"

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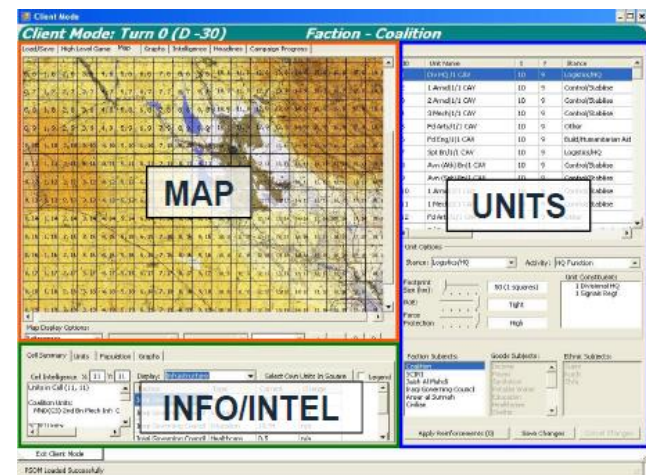Wim-Pieter Huijsman TNO   Wim-pieter.Huijsman@tno.nl

TNO

- The Netherlands Organisation for Applied Scientific Research, active in a wide range of research areas, including defence research.

- Defence research includes research on the specification, procurement, application and evaluation of wargame applications.

- Examples of wargaming focus on Land Based Operations.
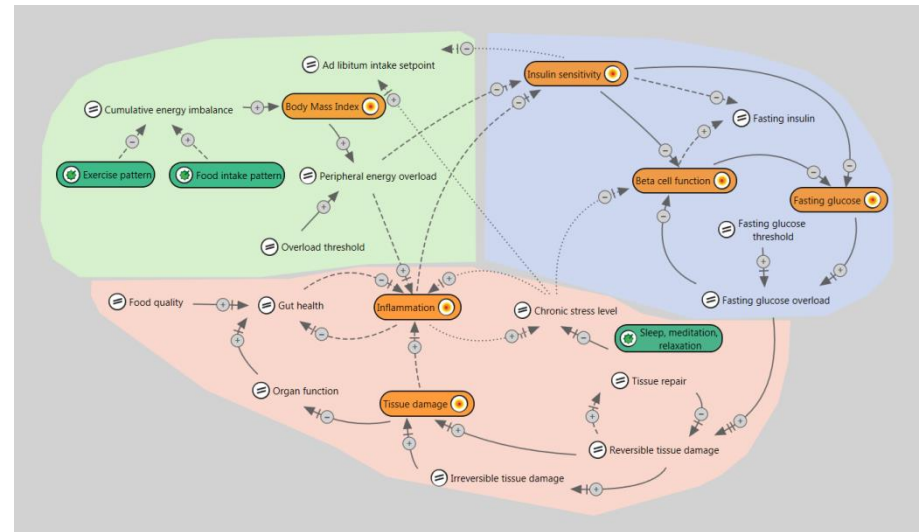
PSOM (Peace Support Operations Model)

- Initially developed by DSTL in support of force development studies. Use of PSOM within the Dutch MoD is currently focused on Training and Education (T&E).

- Simulation takes both the kinetic and non-kinetic effects into account (Comprehensive Approach).

- Providing insight into the complexity of an operations environment and possible (1st, 2nd, 3rd order) effects of actions.

- Training tool for staff officers and commanders at the battalion level and higher. 2015: Use of PSOM during brigade level wargames.

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MARVEL (Method to Analyse Relationships between Variables using Enriched Loops)

- Method using

  group model building and

  simulation to provide insight in

  complex problems.

- Simulation is focused on

  system behaviour and is

  not geographically based.

- Establishing a common understanding of the (high level) problem structure, gaining

  insight in the dynamics of the system, possible interventions and effects.

- Method for high level policy and planning staffs.

GO4IT

- Training tool for decision making processes using a role playing/table-top game and simulation.

- Game is focused on understanding complexity and processes in a Comprehensive Approach operation.

- Training of staff officers and commanders at the battalion level and higher. Currently being used at CMI Command (Dutch MoD) and NATO CIMIC Centre of Excellence (CCoE).

TACTIS (Tactical Indoor Simulation)

- Combined arms tactical training system for executing a military action at the lower tactical levels (Battalion level and lower) using simulation (60 simulators).

- Simulation is focused on the kinetic effects.

- Cavalry and armoured infantry use high fidelity simulators. Combat Support and Combat Service Support use medium or low fidelity simulators.

- Training of individual and crew level TTPs, C2 and communications procedures (till Battalion level).

Steel Beasts

- Training tool for executing a military action at the lower tactical levels (company level and lower) using simulation.

- Simulation is focused on the kinetic effects.

- Training of individual and crew level TTPs, C2 and communications procedures (till company level).

- Training of crews and commanders (till company level) of armoured fighting units, mainly cavalry and armoured infantry.

CDEG (Concept Development & Experimentation Game)

- Wargaming for CD&E purposes, e.g. IED and IED countermeasures.

- Gaining insight in possible future developments

- Developing or improving concepts and counter

  measures

- Relevant SMEs (dependent on topic/theme)

CST (Command & Staff Trainer)

- Exercise support (CPX) using simulation.

- Simulation is focused on the kinetic effects.

- Training of C2 during the execution phase

  of an operation.

- Training of officers and commanders at the battalion level and higher.

Conclusion

- TNO conducts research on the specification, procurement, application and evaluation of wargame applications in support of the Dutch MoD.

- Simulation is increasingly being used as a support tool for wargaming purposes within the Dutch MoD.

- Simulation is being used as a training tool at various levels within the Dutch MoD in training both the planning and/or execution phase of an operation.

Afghanistan Stability / COIN Dynamics

WORKING DRAFT – V3

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