

GCAM: A modeling approach to the Comprehensive Approach

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Abstract

As a result of winning the Dutch Innovation Game 2009, a consortium of TXchange, TNO and NLR developed a serious game aiming at awareness of the Comprehensive Approach (CA). The setting of this game is a UN intervention in a failed state after massive conflict that requires a CA to stabilize the situation. That is, the civil and military actors need to contribute in a concerted effort taking into account their respective strengths, mandates and roles.

Underlying the game is the Go4it CA Model (GCAM), a qualitative CA simulation model. GCAM assumes four actors; Task-Force, Local-Government, Non-Governmental Organizations (NGOs) and Opposing Forces (OpFor). The actors have their own targets and can perform assessments and about 240 (prototypical) interventions. These interventions and external events affect the following 'Reconstruction' parameters:

- Security,
- Displaced persons,
- Basic living conditions,
- Agriculture,
- Healthcare,
- Security Apparatus,
- Governance,
- Rule of Law,
- Education,
- Economic Development,
- Political Support from supporting nations and 'Hearts and minds'.

The GCAM implements in its effects many of the lessons learned from the comprehensive efforts of the past years.

The game was developed under supervision of and with extensive support from the Comprehensive Approach Tiger team of the NATO CIMIC Centre of Excellence (CCoE). Go4it is now fully embedded in Civil-Military Cooperation (CIMIC) training courses of the CCoE and of the Dutch CIMIC battalion.



Negotiations in full gear (final test sessions at the Nato CIMIC CCoE) [photos: F. Aldershof TXchange]

Introduction

The essence of the Comprehensive Approach (CA) to military operations is coordinating military actions with multiple civilian parties such as international organizations, NGOs and local government agencies. Knowing which organization can assist you in what way is key to successfully applying this approach. In this way, the comprehensive approach is a mindset, and must be trained as such. Training CA awareness is the goal of Go4it, a serious game developed by a consortium of TXchange, TNO and NLR, as a result of winning the Dutch Innovation Game of 2009.

The setting of Go4it is a UN intervention in a failed state after massive conflict that requires a CA to stabilize the situation and to reconstruct the failed state. That is, the civil and military actors need to contribute in a concerted effort taking into account their respective strengths, mandates and roles. The game was developed under supervision of and with extensive support from the Comprehensive Approach Tiger team of the NATO CIMIC Centre of Excellence (CCoE). Go4it is now fully embedded in Civil-Military Cooperation (CIMIC) training courses of the CCoE and of the Dutch CIMIC battalion.

Go4it Comprehensive Approach Model

Underlying the game is the so called Go4it CA Model (GCAM). GCAM models the effects of an extensive set of interventions that can be executed in the comprehensive domain. Such interventions include:

- reconstruction activities aiming at improving conditions in Internally Displaced Person (IDP) and refugee camps,
- improving basic living conditions,
- building up agriculture, education and economy,
- aim at establishing rule of law and
- building up a legitimate government with its own security forces.

GCAM has been validated over a period of 3 months in 5 separate test sessions with people from the NATO CCoE, TNO, The Netherlands Foreign Affairs, several NGOs and the Dutch CIMIC battalion. TNO continued the model development after the delivery of the game.

Actors

The simulation is implemented for a setting with four roles:

- Task Force: includes Task force staff, staff of Provincial Reconstruction Team and CIMIC
- Local Government: Local government, including national and regional/provincial governing forces
- NGOs: includes Non-Governmental Organizations, Governmental Organizations (GOs) and International GOs.
- OPFOR: includes (spokespersons for) opposing insurgent forces (militias).

Each syndicate includes 2/3 players and assumes one of the roles.



Local government

Taskforce

Instruments of power

As GCAM is basically non-kinetic, it includes mainly political, economic and civil instruments. A very limited set of interventions directed at safety are available for coalition forces, such as establishing buffer- and demilitarized zones around IDP- and refugee camps. Development activities, for instance, address the reconstruction of health care, education, agriculture, the security apparatus and the economy. It also addresses development of civil society.

Interventions

GCAM presently includes about 240 different 'interventions' that can be executed to provide emergency aid to displaced people, work on the basic living conditions of the overall population, improve healthcare, education, the economy and agriculture in particular and to rebuild the local administration.

Each syndicate/role has a set of about 60 interventions available. Examples are

- 1) Basic reconstruction activities such as 'The construction of clinics, administrative facilities or schools';
- 2) Capacity building, such as 'Developing a program for the education of civil administration' or 'Providing a program for police training and mentoring'
- 3) Political actions such as 'Pressuring the president to replace the local governor'.

Opposing forces (OPFOR) have interventions that may destruct, may derail capacity building and/or corrupt parties involved. However, OPFOR can also decide to be constructive, e.g. to win the hearts and minds of a specific tribe.

Each intervention has certain costs in terms of resources; hence syndicates will have to balance their resources and their use of the instruments of power available. The interventions have primary and secondary effects on the lines of development (education, safety and security, economic development, rule of law, etc.) in the conflict area. Effects can be direct or delayed. The interventions also affect parameters with regard to the political support for the parties and the hearts and minds of the local population. The parameters are elaborated upon below.

Most of the lines of development demand for cooperation between the actors. Generally, acting in isolation will be counterproductive. Players, therefore, need to cooperate and negotiate to gain support for their interventions. In this process, the syndicates learn whom to approach for assistance and whom not. For example, the functioning of an NGO is greatly enhanced by coalition forces assuring safety in a refugee camp. But, simultaneously, most NGOs may not want to be directly associated with military forces to be able to maintain their neutrality. These conflicting interests are captured in the simulation.

Assessments

GCAM provides about 60 assessments that allow demand for intelligence about reconstruction areas. Each assessment, however, will cost resources as people will need to be sent out in the field to gather the intelligence. Hence, the amount of intelligence one may gather is not unlimited and expenditure for intelligence makes that less resources are available for interventions. However, assessments can improve the chance of successfully using interventions.

Parameters

Reconstruction areas

The model implements 9 reconstruction areas:

- Displaced persons, the state of IDP- and refugee camps in terms of safety in the camps, shelter, access to food, safe water, sanitation, health care aiming at prevention of outbreaks of infectious diseases.
- Basic living conditions (BLC); the state of living conditions of the population in the focal area (outside of the camps) in terms of access to food, safe water, sanitation and power.

Together with security and safety, BLC are critical preconditions to social development and economic growth.

- Agriculture; the state of agriculture in terms of food production for the focal area and as a means of living for the local population. Investments in agriculture aim at food relief and famine prevention, proper food production to supply local population, as well as providing economically viable and longer-term sustainable livelihoods by agriculture. A final aspect is the discouragement of the production and sale of illegal crops.
- Healthcare; the state of healthcare in terms of infrastructure (clinics, hospitals), availability of schooled personnel, medical supplies and apparatus, salaries being paid.
- (civil) Security Apparatus; the state of capacity building of civil police and security forces.
- Governance; the extent to which administration infrastructure is in place and functioning, administration officials are in place and functioning properly and government is accepted by the population.
- Rule of Law; the extent to which a 'Legal framework is in place, justice infra and institutions are in place and functioning, census, registration of land, human rights guaranteed, reconciliation at work.
- Education; the state of schooling in terms of infrastructure (schools), availability of schooled teachers, materials, salaries being paid, participation of parents.
- Economic development; the state of economic development in terms of production, transport and trade.

Political support

The model implements two parameters for political support for:

- The conglomerate of NGOs, IOs and GOs; i.e. the attitude of their (potential) donors towards their activities in the conflict area. When political support gets below a critical limit, the funding of the NGOs decreases and with that their impact.
- Taskforce; i.e. the support from the population of the taskforce countries for the presence in the conflict area. When political support for the taskforce gets below a critical limit the risk of withdrawal becomes obvious with as effect loss of support from the local population and the local government, with as effect a decrease of impact.



The NGOs

The model implements four parameters for support from the local population, the so called 'Hearts and minds' parameters; the support each syndicate receives from the local population. Loss of support from the local population and the local government results in a decrease of impact.

Model assumptions on the process of reconstruction

The CA model assumes an overall reconstruction of a failed or fragile state after conflict according to the shape-clear-hold-build and transfer phasing [1].

- Shape; during the planning phase one may do assessments to gain detailed information about the state of the conflict area (the focal area).
- Clear; in the clear phase, the primary focus needs to be on enhancing security and to provide emergency aid to the displaced persons and to the populations of the focal area whose basic living conditions have deteriorated badly due to conflict. In this phase, attempts of NGOs to provide emergency aid are hampered severely by the danger to local NGO personnel, lack of means of safe transportation and looting and corruption due to overall chaos. Only after the taskforce has established buffer- and demilitarized zones around IDP- and refugee camps, the NGOs will be able to provide emergency aid. During the process of establishing buffer zones, Provincial Reconstruction Teams (PRTs) will be main providers of emergency aid to the population.
- Hold; in the hold phase, interventions aiming at security and at improving the living conditions of displaced persons and local population must still be predominant, but the planning should be done for the reconstruction of healthcare, education, agriculture, governance, the security apparatus and economic development and projects. Opposing forces may still try to initiate new conflict but the impact of such attempts decreases. NGOs, IOs and GOs will have to level and cooperate with taskforce to be able to be effective, as aid and reconstruction can be done safely only in areas controlled by taskforce.
- Build; to go over to the build phase, safety will need to be at an acceptable level. From then on, reconstruction on all areas should be in full gear. During the build phase, more and more of the reconstruction should be the responsibility of NGOs and the local government. When the security apparatus is in place, the opposing forces will be less effective in destabilizing.
- Transfer; finally, during the transfer phase all reconstruction needs to be under the responsibility of the local government. CIMIC and/or PRT may still advise, but reconstruction activity by e.g. PRT will show to be counterproductive.

Validation and implementation

GCAM has been validated over a period of 3 months in 5 separate test sessions with people from the CIMIC Centre of Excellence (CCoE), TNO, Foreign Affairs, several NGOs and the Dutch CIMIC battalion. TNO continued the model development after the delivery of the game. In a fairly agile process many revisions have been made upon the model as well as the game mechanics. Go4it now comprises two versions:

- A game version where effects of interventions are given. This version primarily targets cooperation and negotiation. The game version targets novices to the Comprehensive Approach.
- A simulation version where effects are not given. Besides cooperation and negotiation, this version targets analysis and planning and thus complex decision making in the CA domain. The simulation version has a more advanced application. It was found in the trials that personnel with years of experience in CA still learned substantially from playing the simulation version.

After the trial phase, Go4it is now fully embedded in NATO-CIMIC curricula and in the Dutch CIMIC battalion Courses. The CCoE has educated 8 game leaders and the 1th NLD CIMIC battalion educated 7 game leaders to support game sessions.

References

[1] Cordesman, A.H. "Shape, Clear, Hold, Build, and Transfer: The Metrics of the Afghan War (2010). ICIS.
http://csis.org/files/publication/100302_afghan_metrics_combined.pdf