Modeling Security Sector Reform Activities in the Context of Stabilization Operations

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Abstract
Security Sector Reform (SSR) activities are used within the context of a stabilization operation in order to develop and secure the host nation from internal and external threats to its stability. This article examines four means of modeling SSR within the context of a stabilization operation for use within the Defence Science and Technology Laboratory’s suite of stabilization models. It examines the means to represent the improvement of host nation units, represent security sector capability building activities, measure the progress of high-level SSR and represent Disarmament, Demobilization and Reintegration.

Keywords

1. Introduction

Security is the precursor to development. If stabilization and reconstruction efforts wish to develop strong, stable host nations, then the foundations must be created in the form of a capable and responsible security sector. Security Sector Reform (SSR) and SSR-related activities, referred to in this paper as Security Sector Stabilization (SSS), support this by strengthening the ability of the host nation to provide security, thereby allowing it to assume the responsibilities of protecting itself and the communities that exist within it.

The Defence Science and Technology Laboratory (Dstl) has attempted to apply SSR theory and insights to inform and enhance its stabilization modeling and wargaming capability. The first phase of the research attempted to understand the scope of the problem, identify key areas for representation and suggest a means of modeling them within the Peace Support Operations Model (PSOM). The outcome of this study led to the identification of four key areas for SSR modeling.

Capacity Building Model (CBM): A means of measuring the improvement of a host nation’s security actors at the unit level.
Capability Building Activity: A means of representing Mentoring, Monitoring, Partnering and Enabling activities in accordance with the operational approach adopted in Afghanistan.
National Reform Metrics (NRM): A means of observing and measuring the predominantly political process that reforms the institutions, structures, organizations and bodies that lead, manage, govern and oversee the security sector.
Disarmament, Demobilization and Reintegration (DDR): A means of removing combatants from the fight in order to terminate violent conflict.

These four study strands are now in the process of being examined and developed by the SSR study team. They are in various stages of completion ranging from the incipient conceptual phase to a stage where the concept has been endorsed and applications are being identified. The study intends to deliver the whole package by the end March 2011 in order to enhance defence modeling capability in the new financial year.

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2. Defining Security Sector Reform within a Stabilization Operation

**Stabilization**: UK Joint Doctrine Publication 3-40 – Security and Stabilisation: The Military Contribution, defines stabilization as:

The process that supports states which are entering, enduring or emerging from conflict, in order to prevent or reduce violence; protect the population and key infrastructure, promote political processes and governance structures, which lead to a political settlement that institutionalizes non-violent contest for power; and prepares for sustainable social and economic development.¹

UK stabilization operations are undertaken for the benefit of UK strategic goals. This is in contrast to Peace Support Operations (PSO) and humanitarian assistance missions, which are bound by their neutrality and mandate (although there are similarities in other respects).

**SSR**: The SSR process aims to create a well-functioning and well-governed security framework that allows individuals to be free from fear in order to promote access to services, livelihoods and opportunities for development.² The official articulation of UK SSR policy is that:

SSR helps developing and transitional countries deliver security and justice more legitimately, democratically and effectively by supporting improved oversight and governance of the security sector, building capacity to undertake analysis of security threats and requirements, increasing professionalism of security actors and supporting improvements in the management of the sector, including the allocation and use of resources. It consequently reduces the potential for either internal or external conflict.³

SSR is a predominantly political activity that reforms the way in which the sector is governed, managed and held to account.⁴ Successful examples of SSR generally take place after a country has been stabilized, the main combatants have reached a political settlement and democratic government has been established.

SSR considers the overall nature of a host nation’s security sector rather than addressing individual security actors in a piecemeal fashion. The security sector encompasses all stakeholder actors responsible for the protection of the state and the communities within it. These actors include the Core Security Actors, Non-statutory Security Actors, and the organizations, institutions and bodies that control, manage and oversee them.⁴ SSR requires strong national political leadership, local ownership of the process from a broad range of stakeholders and should employ democratic principles to strengthen accountability.⁵

SSR requires a minimum of host nation governmental capacity and national stability in order for reforms to be implemented. Because stabilization operations can take place within a range of failed and failing states, or within a non-benign environment, this minimum capacity may not be available or there may be widespread insecurity that complicates the SSR process and adds extra burden to nascent host nation forces and institutions.⁶ In this stabilization environment it may be necessary for interim security measures to be implemented.

**SSS**: The UK Stabilisation Unit refers to a range of activities that enable essential and minimum security functions as SSS activities. These activities are different from SSR, although they can ‘help lay the foundations for SSR by promoting political consensus, building capacity for civilian oversight and adopting a sector-wide approach’.⁵

In the context of a stabilization operation, SSS activities are likely to be undertaken in advance of a SSR programme, as SSR requires a minimum threshold of host nation capacity, capability and ownership for reforms to take hold.¹ Fragile and failed states are, by their nature, incapable of providing basic functions of state. Therefore it is likely that intervening forces will be tasked with SSS activities, such as interim responsibility for security, combating irregular activities and upholding the rule of law.³ Transition will gradually return the responsibility for security to the host nation as part of a campaign plan.³

SSS can be roughly separated into three activity groups: interim solutions that fill the statutory vacuum and provide non-indigenous support, including interim security: ‘developmental’ SSS, which builds the capacity and capability of the host nation; and peace-building activities.

Long-term SSS developmental activities, including training and equipping of security forces and establishing ministries and administrative bodies, is critical to creating a security sector that is able to enact and sustain SSR. The interim security and developmental functions of SSS overlap substantially and grow progressively closer as transition approaches. This is manifested in activities such as embedded partnering and joint operations, where intervention forces and indigenous forces work together initially for training purposes but latterly host nation forces take the lead, thereby providing a local security solution.

In addition SSS activities support the political and peace-building process through programmes such as pre-conflict termination DDR and attempts to control the number of available small arms.⁵ DDR is a particularly important SSS element that resolves conflict, reconciles non-state armed groups with society and strengthens the role of the state as the legitimate user of coercive force and the sole authority for the provision of security.

Defining SSS has been complicated by the lack of a common definition. The UK Stabilisation Unit is the only UK body that uses the term ‘Security Sector Stabilization activities’ in open-source policy publications. By comparison, UK military doctrine does not refer to SSS, instead it considers activities such as interim responsibility for security, capacity building, etc, as an ‘Intervention, Capacity Building and Transition’ sub-set of UK engagement in...
SSR. Elsewhere SSS activities are referred to under the term Interim Stabilization Measures (ISM).

3. Data Collection

For this research the study reviewed a range of SSR and stabilization literature, including UK and international military doctrine, national, international and non-governmental policy papers, and academic and think-tank publications. The study also reviewed case studies of SSR in order to gain an appreciation of the real-world challenges of operationalizing SSR theory.

Reviewing the SSR theory it became clear that while there was a general consensus on the high-level aims of SSR, the operationalization of SSR theory was not straightforward and that following a prescriptive process would not guarantee operational success. Some organizations, such as the Organization for Economic Co-operation and Development (OECD), have attempted to bridge the gap between policy and practice by developing generic SSR strategies and handbooks. These handbooks emphasize donor best practice but they do not attempt to provide a prescriptive formula, rather they focus upon the need to conduct security sector assessments, develop local ownership, encourage procedural transparency and promote good SSR management techniques. Furthermore, influential SSR case studies have argued that successful SSR cannot be planned or programmed and that reforms are host nation led with donors only providing support and guidance. Both SSR handbooks and case study evidence suggest that operationalization of SSR requires reforms to be host nation led; the role of the donor must be to provide support, assistance and guidance to the process. Furthermore, to some degree SSR is done on an ad hoc basis and is dependent upon the contextual political, institutional, social and economic environment.

UK stabilization doctrine has been recently updated from the previous iteration developed to support the PSO and humanitarian interventions undertaken pre-millennium. This update reflects the challenges of the stabilization environments encountered in Iraq and Afghanistan, including the importance of contextual factors such as permissiveness of the environment and the capacity of the host nation. For example, when considering the Iraq and Afghan stabilization operations, SSS activities (such as Operational Mentor and Liaison Team (OMLT), capacity building and DDR) outweigh SSR as both countries’ security forces are embroiled in Counter Insurgency (COIN) operations requiring wartime levels of security forces supported by significant external assistance in order to provide security. However, stabilization doctrine can also support SSR within the context of post-conflict peace-building, where a political settlement had reduced violence and created a national government.

Lastly, stabilization operations, while sharing many similarities with other types of PSO or humanitarian reconstruction and development operations, have more uncertainties and risk. In general donor nations contributing to stabilization operations are more willing to accept the physical risks of conducting SSS activities in non-benign environments than donors contributing to PSO or humanitarian operations. The willingness to address systemic security reforms while also waging an aggressive COIN campaign must be considered particular to stabilization operations. In addition, donors have faced significant uncertainties over the success of SSS activities undertaken in a non-permissive environment. Uncertainties have included the pace and effectiveness of SSS as well as the ability to which donors could rely on civilian and Coalition support in a non-permissive environment. The modeling implications are clear; in the context of a stabilization operation, SSR and SSS can take place within an environment that covers a spectrum of benign and permissive to non-benign and non-permissive.

4. Security Sector Reform Study Strand One: Capacity Building Model

Within stabilization gaming, capacity building has not been effectively exploited as a metric of campaign success due to an under representation of capacity building in stabilization modeling. However, capacity building is an essential line of operation within a stabilization operation. It is an activity that focuses upon the technical and professional development of the host nation’s Core Security Actors: the Armed Forces, Police, Border Guards and Intelligence officials. The aim of capacity building is the fostering of the host nation government’s (HNG’s) capacity and legitimacy in order to provide a locally owned security sector capable of protecting the population and infrastructure. For the UK, capacity building is an activity that can be undertaken across the spectrum of SSR engagements. This spectrum ranges from routine SSR, such as the training of indigenous security actors in niche or complex skills in Eastern Europe and the Baltic nations, to the post-intervention/pre-transition environment where security actors must be (re)assembled from scratch (further information on the role of defence in capacity building can be found within JDN 3/07 The Military Contribution to Security Sector Reform).

The aim of the CBM was to enable the capacity building of host nation units to become a decisive condition for campaign success within a stabilization scenario wargame. Prior to the stabilization game Blue (Coalition) and Green (HNG) Faction Commanders would agree upon capacity building targets as part of the campaign plan. These targets would be decisive conditions for measuring campaign success. During the game the CBM, as part of the Operational Game (OG), would provide Faction Commanders with turn-by-turn updates on the status of host nation units. This would be used in combination with the high-level Strategic Interaction Process (SIP) to provide Commanders with the means to observe, react and alter their capacity building efforts in order to achieve operational success. When reacting and
making alterations to their capacity building programme, the Commander would include capacity building orders as part of their Commander’s Intent Slide in the SIP.

The CBM was conceived and designed to enhance the PSOM model. The CBM study used Capability Milestones (CM) as the standard metric that would represent host nation development. The CM terminology used by the CBM study was specific to Afghanistan and the development of the Afghan National Army (ANA). A newly formed unit, which has completed basic training at a Military Training Centre (MTC), is considered to be at CM4. At CM4 the unit is not capable of planning, conducting or sustaining an operation. The unit moves up to CM1 with additional training, mentoring and operational experience. At CM1 the ANA unit is considered to have reached Full Operating Capability (FOC) and is capable of planning, conducting and sustaining an operation.1

The CBM study assumed that the CM level of a host nation unit could be determined from a synthesis of three factors: manning, leadership and experience. These factors would correspond to bands representative of CM levels one to four. The lowest of the three factors would cap the CM level of the unit. Visually these three factors would be represented in the PSOM OG as the three axes of a radar chart: an example is shown in Figure 1. This would provide the Commander with the status of each of the host nation units currently undergoing capacity building.

The CBM provides a means by which the capacity building line of operation can be better represented in stabilization wargaming. Therefore it enables capacity building to become a decisive condition, a metric of success that can be planned against by Commanders and used as a determinant of campaign success.

The CBM has passed beyond the conceptual phase and work is ongoing to implement it into PSOM. Subsequent stress testing will be required for final validation and rollout of the enhanced PSOM model with capacity building functionality. However, there is a final point to address. The study was presented with an additional challenge just prior to publishing. The CMs were introduced into the Afghan theatre in 2005; however, they were withdrawn in favour of the Command Unit Assessment Tools (CUAT) in April 2010 amid criticism that they did not accurately encapsulate the developmental state of the Afghanistan National Security Forces (ANSF).12 However, for the time being PSOM will remain using the CM as it does give a reasonable representation of the main HNG capability measures, and has operational precedence. Within the context of a stabilization game, where turns are rapidly processed, the four CM levels provide an adequate amount of detail to inform the decision making of Faction Commanders as to the general trend of host nation development. Furthermore, the CUAT is a relatively new system and initial assessments have not yet cleared it of the same charges that were levelled against its predecessor.13

5. Security Sector Reform Study Strand Two: Modeling Capability Building Activity

As wider understanding of SSR in a stabilization environment evolves, the complex nature of the activities required of the military component of a stabilization force is becoming more apparent. Leaning on the UK experiences in Sierra Leone, and the UK/US experiences in Iraq and Afghanistan, a series of activities have been identified that PSOM represents, or is seeking to represent. These activities may have an idealistic timing sequence, and there are aspects that have to happen in sequence, but in reality, one or more may happen concurrently. For example, Training will need to take place before Mentoring, but Training will continue to take place with new units, while previously trained units will have moved on to being mentored. The additional challenge is the varying security levels in theatre. It is expected that in the early stages of a campaign there will be a higher security burden placed on the stabilization force than on the HNG. As the campaign progresses, the burden should shift in stages across until the host nation has re-assumed responsibility, and can continue to do so without the direct support of the stabilization force.

The identified activities, sourced from UK Doctrine Notes and post-operational tour reports that PSOM does, or is being developed, to represent, are: Training, Mentoring, Monitoring, Partnering, Enabling, and Overwatch.

These activities or types of activities can be represented in PSOM either explicitly in terms of simple stances and unit relationships or implicitly in terms of linking units characteristics based on strategic player intentions.

Training is an example of simple linked units. Currently this is achieved in PSOM by selecting units in a square to ‘Provide Training’ (‘Provide Training’ and ‘Receive Training’, along with the OMLT stances, are specific stances in the PSOM model) to a specific faction. This stance will increase the experience value of units from the
selected faction(s) in the same square who have had their stance set to ‘Receive Training’. (The receiving unit will also need to set its faction target to the faction providing the training, which is a PSOM functionality process.) The rate of change of the experience value will depend on the experience level of the unit providing the training, and the ratio of training units to units being trained.

The challenge to players in terms of training is largely force structure burdens, and identifying the optimum force lay-down given the range of activity. The PSOM stance allows for the training unit to protect itself and to defend the unit under training, but does not allow for any other security activity to take place.

Mentoring, Monitoring, Partnering and Enabling are more descriptive of the manner in which other activities are carried out. At the operational modeling level, the characteristics of these types of activities that are of most concern, is the Command and Control (C2) and the effect of linking the capabilities of units.

All four activity types are designed to assist the Indigenous Security Forces (ISF) conduct security operations, and should therefore be represented in such a way as to show the effect of unassisted operations, as well as the different levels of assisted operations. Crudely, an ISF unit should have different capabilities depending on whether it is unassisted, or mentored/monitored/partnered/enabled by a stabilization force.

Modeling variable unit characteristics has provided significant challenges in PSOM. There are two solutions that are currently being investigated, with one hopefully being implemented in the development programme. Firstly, modifiers for ISF unit capabilities could be identified that would enhance a unit’s basic capability. This would be enacted by a control function during a game when a player indicates a strategic decision to move to a particular type of activity. This solution is inhibited by the data-gathering requirements to justify the value of the modifiers, and the limited impact the decisions will have on the player’s planning processes.

The second solution is to link unit capabilities. This process is currently done in the Wargame Infrastructure and Simulation Environment (WISE) model in Dstl, but cannot be done across factions without controller interaction (the WISE model investigates battlespace operations in land domain with an emphasis on C4 issues). What is being proposed for PSOM is an additional task for each player where commanders can set relationships between specific units from their own and other faction’s force structure. Linking with other units will then combine the unit’s abilities, with the relationship determining how the separate unit’s capabilities were combined. Different ‘assisting’ activities will have different effects on the final combined characteristics. The final figures are under investigation but a hierarchy of activity, with a range of combinations, would stretch from a Blue and Green unit operating independently in the same square having no combined effect, while the other end of the spectrum would be a coordinated link between Blue and Green, where the combination of unit characteristics could be one added to the other. As a guide, the range of relationships could be considered as follows.

Assume Green ‘experience’ = $x$ and Blue ‘experience’ = $y$.

No relationship results in no combination (remains two independent units).

**Mentored:** combined capability = $x + \frac{y}{3}$, reflecting the ‘stiffening’ effect of the mentoring teams.

**Enabled:** combined capability = $x + \frac{2y}{3}$, reflecting the positive impact of logistic support and other unit enhancements, such as Fire Support Teams.

**Partnered:** combined capability = $x + y$, reflecting the allied nature of the coordinated activity.

However, this model still offers difficulties. Mentoring, as understood in UK doctrine, cannot be reflected here, and Enabling is not always a coordinated activity between like units. The effect of logistics support and Fire Support Teams may be better shown through the use of modifiers. It is likely that as PSOM development continues this year, the final solution applied will be a combination of combined unit capability equations and additional unit modifiers.

There are further wargame requirements linked to SSR modeling that place further burden on players. The decision points in a campaign that will allow a stabilization force to alter its deployed SSR support force structure, as well as various progress targets, should be set either before a wargame begins, or during a set time in the early stages of the wargame. These decision points and targets should revolve around the ISF capability. The Capacity Building Model can be used to show where units are in terms of their development. This model, along with the outputs from the Unit interaction system, found by interrogating the maps on the OG in PSOM, can give an overall summation at any point of how ISF development is progressing.

The rate of progression in PSOM will inform the campaign planners on aspects of force structuring. However, the rate of progression is currently unsupported by data. In order to rectify this data gap, part of the current development programme is determining the rate of progression of ANSF units under training and mentoring in Helmand. It is hoped that comparing the rates of progress of individual units to the UK and US force levels assigned to training them will develop a rough guide as to how quickly, or slowly, ISF units could be expected to improve. This comparison can then be contextualized by reviewing the overall security situation over the same period. Understanding the three-way relationship can ensure that wargames will correctly challenge planners.

In summary, PSOM currently under represents the SSR process. There is limited scope within current coding to fully demonstrate the effects and challenges of the
military contribution to the SSR process. However, there is a development plan in place that will, based on previous and existing SSR programmes, ensure that the required improvements will be made this year.

6. Security Sector Reform Study Strand Three: National Reform Metrics

The National Reform Metrics (NRM) study will attempt to measure SSRs in order to understand pure SSR and design a dynamic model capable of representing the process of organizational and institutional reform. The NRM study will represent the high-level reforming activities that affect the host nation’s government ministries and departments, as well as the institutions responsible for its Core Security Actors.

Guidance and advice on donor and SSR best practice are widely available and broadly outline the process of conducting SSR. However, as already stated these publications are not recipes for success; each attempt at SSR will encounter unique political, institutional, social and economic variables within the host nation that alter the character and challenges of reform. These variables will include, for example, the extent of the reforms, the strength of local ownership and local political will, and ability of the security sector to change. Other variables include the role of SSR spoilers.

There is also the role of the donor to consider and positive donor modifiers could be: the close relationship of support between donor and host nation, or a well-devised programme of reform. However, negative variables could also be incurred, for example, SSR mismanagement, a failure to gain host nation support, incorrect sequencing of SSR projects, ineffective mitigation against spoilers, or, particularly in the context of a multinational SSR effort, differing and inconsistent approaches to SSR by donors.

The NRM study is still in its early conceptual phase but initial investigations seek to understand how a theoretical unit of effort is transformed into a unit of effect, that is, reform. This will require the identification of a range of variables and then attributing them with properties that positively or negatively modify the reforming effort. The NRM study will then apply these metrics to better understand the process of SSR. This will not yield a predictive SSR model; however, it will allow the study to focus more upon the process of interaction between different variables rather than the end result.

One such method for understanding the SSR process is the Dstl-developed Institutional Reform Cascade model, which is under consideration as a means of exploiting the metrics in order to show how a security sector body or institution can be reformed over time. A diagram of the Cascade can be found in Figure 2.
SSR is a transformational act and the result of accumulated change over time, such as acceptance of institutional oversight, universal local ownership of the process, a normative approach to security, improved procedures, etc. This model attempts to represent that process of incremental transformation, by building upon previous phases of reform (i.e. Institutional Reform Phases), while also allowing input in the form of ‘Reforming Effort’ and ‘Variable Factors’. While the Institutional Reform Cascade was been developed by Dstl it was inspired by the uranium enrichment cascade, albeit with some omissions, thereby lending its ‘cascade’ terminology to this high-level reform model.

The process is started in the first phase by the introduction of Reforming Effort; this represents the sum input of the host nation reformer, with donor nation support. Variable Factors are also introduced; these are a broad categorization that encompasses a multitude of positive and negative modifiers including, but not limited to, the acceptance of stakeholders to change, the status of host nation governance, national security and host nation capacity. The Variable Factors will also include other modifiers from the wider environment, such as the state of governance reform in general, the local security situation and the pace of infrastructure and human-capital development. Within Institutional Phase One, the Effort is modified by the Variable Factors thereby precipitating Reform Outputs. This Output is fed from the initial phase into the next phase in order to represent the cumulative effect of reforms. A second round of Effort and Variable Factors are introduced and the cycle continues phase by phase until it reaches a point of termination.

Through the input of positive SSR modifiers, the Institutional Reform Cascade can be used to refine the security sector body, thereby leading to improvements over time. However, it can also allow SSR to be affected by negative modifiers, which have the potential to slow, stifle or even derail SSR if they are not dealt with. By negative modifiers, we collectively refer to modifiers, including, but not limited to, a deficit or mismanagement of Effort, and negative Variable Factors including a lack of local ownership, and the activities of spoiler groups actively opposed to SSR. If anti-reforms are present they can be off-set either by improved Effort or by addressing one or more Variable Factors. However, each phase is linked in series; therefore, in the worst case a build up of negative modifiers will be passed from phase to phase effectively poisoning the reform process over the long term.

Finally, the Institutional Reform Cascade views SSR as the product of several cascades, each representing a different security sector body. The end product from each phase informs the overall reform of high-level security sector bodies and institutions. In this simplified diagram the cascades are depicted as operating in parallel; however, in reality they may need to be reformed in series or have complicated interdependencies. It is also likely that the status of the security sector will have wider implications for the performance of the Core Security Actors and the overall legitimacy of the HNG.

The NRM study is currently in the conceptual phase and the work presented requires significant effort to bring it to fruition. However, the importance of this study to the overall representation of SSR cannot be underestimated. SSR is predominantly a political activity that creates lasting changes to the security sector by reforming the high-level structures that manage and govern the system of actors that make up the sector. To simplify by way of an anthropomorphic analogy, change the head and the body will follow. While there is certainly a great deal that can be achieved by improving capability through the provision of training and equipment, sustainable long-term improvements can only be made by ensuring that the security sector is responsibly managed, population-centric, instilled with a culture that upholds the rule of law and human rights, and accountable to oversight.

7. Security Sector Reform Study Strand Four: Disarmament, Demobilization and Reintegration

The objectives of Disarmament, Demobilization and Reintegration (DDR), as defined by the UK Stabilisation Unit, are to remove combatants from weapons and military organizational structures and to help them to integrate socially and economically into society. DDR programmes are commonly run prior to or in parallel with SSR programmes. DDR attempts to terminate conflict by providing a means of breaking the cycle of violence and a means of returning ex-combatants to society. The DDR study is not yet mature and lacks a sufficient understanding to provide concrete modeling insights at this stage. However, incipient concepts exist, which draw a distinction between the DDR of irregular ex-combatants and the statutory forces, such as the national army.

Early investigations into the DDR of irregular actors have presented three areas for investigation. Firstly, in addition to the process of DDR, this study should also consider the engagement phase whereby combatants enter into a DDR programme. This will also look at the contextual environmental dynamics surrounding the DDR process. Secondly, it seems likely that two ex-combatant streams will be modelled: that of the leaders and that of the rank-and-file. Modeling the DDR of leaders will include their willingness to renounce violence, put their weapons beyond use, agree to a political settlement and integrate into the national political landscape. This will most likely take place within the SIP. For the rank-and-file, DDR will focus on their renunciation of violence, the disposal of their weapons and their
willingness and ability to sustainably reintegrate into peacet ime society. This will be modelled within the OG. Management of ex-combatants will need to be considered. For example, leaders and high-ranking ex-combatants will expect and agitate for political representation and national politics and low-level ex-combatants will expect employment, housing and peacetime opportunities in return for renouncing violence. Thirdly, the DDR model must examine the wider societal, political and economic impact of reintegration. For war-torn societies DDR may be a traumatic process which, if improperly managed, could cause increased instability. This area of modeling will investigate the reaction of society to the reintroduction of former combatants, and the wider impact of DDR upon available employment, housing and infrastructure.

A separate line of investigation will look at host nation demobilization. DDR is commonly associated with non-statutory irregular actors; however, it could also be used as a mechanism by which host nation forces can be right-sized in line with a reformed force structure. Historically mass demobilizations have required forethought and organization in order to mitigate against unforeseen consequences. The DDR model will need to be versatile enough to deal with host nation demobilization.

There is also an ambition within the DDR study to examine the sequencing of SSR and DDR activities and investigate whether there is a means of optimizing a programme of SSR-DDR activities that yields long-term peac building dividends. An example would be whether DDR could reduce conflict and bring forward the SSR programme, or whether DDR could act as a confidence-building measure, thereby creating the necessary local ownership and political will to begin SSR.

8. Wider Links from Security Sector Reform Study to Governance and Legitimacy

There are considerable links between the SSR study and other ongoing work into host nation governance and legitimacy. The security sector and the ability to provide security is a basic function of the state and a national government that is incapable of providing this service will struggle to claim legitimacy. Furthermore, a reformed security sector is, by implication, well governed.

The SSR study is aware of the wider links between it and governance and legitimacy research also being conducted by Dstl. It is recognized that the outputs of a reformed security sector and improvements to the delivery of security will inform the totality of host nation governance and legitimacy. However, it also recognizes that, vice versa, there will be inputs from the wider governance that will modify the host nation’s capacity to support reform, and create bottlenecks that affect the reform process. Questionable legitimacy may also diminish the ability of the state to provide security and undermine claims to be the sole authority with the mandate to use coercive force.

These interconnections between the wider governance and security piece are still not fully understood; nevertheless, the requirement has been identified and collaboration within Dstl is underway. A dynamic approach to governance, legitimacy and the role of the security sector will be the subject for future study.

9. Conclusion

The work done so far on modeling SSR within a stabilization environment is not conclusive; however, it is a good start. The four areas that have been chosen for initial work: the Capacity Building Model, Capability Building Activities, National Reform Metrics and Disarmament, Demobilization and Reintegration, will be joined by many more in the near future, thereby creating a more complete SSR representation. SSR and SSS activities represent a hugely complex topic. In the search for modeling assumptions some of the subtleties of SSR had to be sacrificed for the sake of parsimony. However, this should be judged an inevitability rather than a failing. The value of this work is not in the creation of a predictive model, but in the creation of an informative model that can improve the understanding of the stabilization environment amongst stakeholders, which include practitioners both military and civilian. In this way it is hoped that a real and tangible operational benefit can be provided.

References

13. Cordesman AH. *The need to refocus Afghan metrics and narratives on key local areas and population clusters*. CSIS, 22 July 2010.

**Author Biographies**

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