Chapter 8 – THE VALUE VIEW

INTRODUCTION

The *NATO Code of Best Practice for the C2 Assessment* (Chapter 5, Measures of Merit) states that "the benefits of C2 should be evaluated through their impact on the fulfilment of the military and policy objectives, and the impact of C2 should be measured in terms of specific qualities that are relevant to these objectives." These qualities constitute the Value View; it tells us what matters. By examining the variables that comprise the Value View and the relationships between and among them, expressed in a value chain, an analysis may be made of the factors contributing to the outcome of military missions.

The Value View draws out those variables that reflect the benefits and drawbacks of various approaches to C2. Within the C2 Conceptual Model, these variables both influence and are influenced by others. These influences are what we mean when we refer to relationships between and among Value View variables.

DEFINITIONS

The following terms are important to understanding the Value View.

- *Value*: worth, usefulness, or importance (from an entity's perspective); utility or merit.
- *Value View*: a subset of variables from the Reference Model that have been selected to represent the utility of a C2 Approach.
- *Value Chain*: the relationships between and among (a subset of) the variables in the Value View.
- *Measures of Merit*: degree or grade of excellence; expressed in terms of performance or effectiveness.
- *Measures of Agility*: the ability to be robust, flexible, responsive, innovative, resilient, and adaptive. Characterised by quickness, lightness, ease of movement; nimble; Agile C2 individuals, organisations, C2 systems, and forces have a synergistic combination of the above six attributes, the key dimensions of agility.
- *Composite Variable*: a group of related variables representing a higher level concept. For instance, the quality of information (composite variable) consists of a number of variables such as the accuracy or completeness of that information.

MEASURES OF MERIT

The NATO COBP presents the five-level hierarchy of Measures of Merit depicted in Table 8-1.[1]

[1] NATO Code of Best Practice. p. 92.

Table 8-1: Measures of Effectiveness Categories

Measures of Policy Effectiveness	The degree of success in influencing and determining decisions, actions, and other matters as related to societal and policy outcomes.
Measures of Force Effectiveness	The extent to which military missions are accomplished.
Measures of C2 Effectiveness	Impact of C2 systems within the operational context.
Measures of System Performance	Internal system structure, characteristics, and behaviour.
Dimensional Parameters	Properties and characteristics inherent in the physical C2 systems.

MEASURES OF AGILITY

In addition to Measures of Merit, SAS-050 explicitly considered agility as it applied to:

- Force;
- Command and Control; and
- Organisation.

Each of these aspects of agility has the following attributes:

Table 8-2: Measures of Agility Variables[2]

Adaptiveness	The ability to change work processes and the ability to change the organisation.
Flexibility	The ability to employ multiple ways to succeed and the capacity to move seamlessly between them.
Innovation	The ability to do new things and old things in new ways.
Resilience	The ability to recover from or adjust to misfortune, or a destabilizing perturbation in the environment.
Responsiveness	The ability to react to a change in the environment in a timely manner.
Robustness	The ability to maintain effectiveness across a range of tasks, situations, and conditions.

VALUE CHAIN'S COMPOSITE LEVEL

Figure 8-1 depicts a value chain that includes Qualities of Information, Knowledge/Mental Models, Awareness, Understanding, Decisions, and Execution.

[2] Alberts and Hayes, Power to the Edge. pp. 127-128.

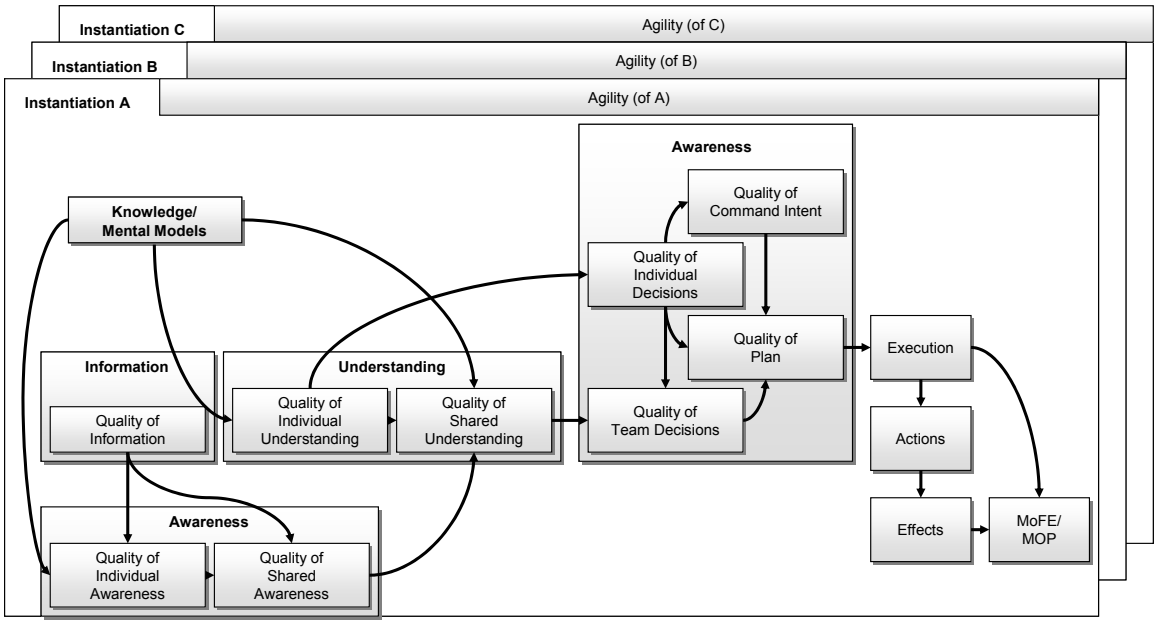

Figure 8-1: The Value View.

ATTRIBUTES OF VALUE RELATED VARIABLES

Value View variables usually have the following attributes:

- *Accuracy*: the degree to which information quality matches what is needed; conformity to fact; the ability of a measurement to match the actual value of the quantity being measured.
- *Completeness*: the state of being entirely whole.
- *Confidence*: trust or faith in a person or thing; a feeling of assurance; the state or quality of being certain.
- *Currency*: time lag.
- *Correctness*: freedom from error.
- *Consistency*: the agreement or logical coherence among things or parts.
- *Precision*: level of granularity.
- *Relevance*: pertinence to the matter at hand.
- *Timeliness*: the extent to which currency is suitable for use.
- *Uncertainty*: not being able to know or predict something.

Some of these are independent of a situation (e.g., currency) while others are in the context of a situation (e.g., timeliness).

All of the quality variables take on the nine attributes above. Many of these variables are illustrated in other chapters throughout this report as indicated below. The quality variables include:

- Quality of Information (Chapter 4)
- Quality of Shared Information (Chapter 4)
- Quality of Plan (Chapter 5)
- Quality of Awareness (Chapter 5)
- Quality of Shared Awareness (Chapter 5)
- Quality of Understanding (Chapter 5)
- Quality of Shared Understanding (Chapter 5)
- Quality of Actions (Chapter 7)
- Quality of Decisions

Quality of Decisions is characterised by variables representing *accuracy, completeness, consistency, correctness, currency, precision, relevance, timeliness,* and *uncertainty*. Collaboration and understanding influence the decision variables, while the decision variables themselves influence quality of command intent and action variables.

SUMMARY

The Value View consists of a set of variables that constitute the C2 Value Chain and serve as a checklist that can be used to identify those most relevant.

Analysts need to take the Value View from the conceptual model and instantiate it in a manner appropriate to the problem to be solved. This instantiation will involve the identification and selection of pertinent variables.