## Introduction

n 6 March 1989, the opening plenary session of the Negotiation on Conventional Armed Forces in Europe (CFE)¹ was held in Vienna, with its aim to "strengthen stability and security in Europe."² The CFE represented the culmination of efforts, beginning with Soviet leader Mikhail Gorbachev's offer in April 1986 to discuss force reductions from "the Atlantic to the Urals," to organize a new forum for conventional arms control and circumvent the 16-year stalemate in the Mutual and Balanced Force Reduction (MBFR) negotiations. The talks opened amidst guarded optimism that a politically and militarily significant reductions agreement was, for the first time, within reach. However, the participants³ were under no illusions that the task facing them was simple. Disagreements on the scope and extent of reductions were inevitable. In addition, one of the more contentious issues promised to be, as in past negotiations, the specifics of the verification regime.

In an attempt to better understand the complexities likely to be encountered when negotiating the structure of the regime, this paper offers an introductory examination of three important dimensions of conventional arms control verification:

- (1) the elements of a possible CFE verification regime;
- (2) verification technologies; and
- (3) operational factors influencing the effectiveness of verification systems.

In terms of the first, various conventional arms control verification measures have been proposed in recent years, meeting with varying degrees of acceptance by members of NATO and the Warsaw Treaty Organization (WTO). From these proposals, it is possible to identify the elements likely to receive close consideration as the details of the verification regime are discussed. Consequently, in the first section of this paper, major MBFR, conventional arms reduction, and CFE proposals from 1985 to the present are surveyed to highlight these elements.

As apparent from the survey, most proposals stress the importance of on-site inspection for confirming treaty compliance. Equally important, however, are the overhead monitoring systems used for wide-area surveillance. Part 2 summarizes some military and civilian technologies available for aerial and spaced-based surveillance.

The paper then examines the question of system effectiveness for wide-area coverage. One concern of the participants as they consider the elements of the

