Critical chain analysis

Develop/discuss a critical path/critical chain analysis based on this case study: Boeing's Virtual Fence January 14, 2011, Secretary of Homeland Security Janet Napolitano made it official: The Virtual Fence Project was to be officially canceled. In her statement explaining the decision, Napolitano cited the difficulty in creating a unified, fully integrated security system and promised to “pursue a new path forward.” What was left unsaid were the reasons that led to the final decision—principally, struggling with a too- complicated technical system that did not work but was leading to ballooning costs. Illegal crossing into the United States along the Mexican border has reached epidemic proportions in recent years. Fear of drug smuggling, illegal aliens, and possible terrorist incursions have made the issue of homeland security one of the major “hot buttons” in the political arena, both in Washington, DC, and within states located along the southern border as well as those in proximity to Canada. The problem is compounded by the sheer sizes of the borders involved. The Mexican/ U.S. border runs for nearly 2,000 miles, much of it across desert wastelands and inhospitable and remote areas. Establishing any sort of border security, in the wake of the 9/11 attacks, is a national necessity but a daunting and difficult task. The Department of Homeland Security (DHS), organized following the attacks on the World Trade Center towers, is charged with the responsibility of securing all borders and points of illegal entry into the United States, in cooperation with Customs and Border Protection. As part of its mandate, it has developed plans for creating a more secure and stable border with Mexico to prevent the continuous flow of undocumented immigrants, drugs, and potential terrorists. For the first stage in this process, DHS proposed a project to physically and electronically seal the stretch of the desert between the United States and Mexico under a multibillion-dollar contract named the Secure Border Initiative Net (SBInet). President Bush in May 2006 called SBInet “the most technologically advanced boarder security initiative in American history.” A 28-mile stretch of desert, centered on Nogales, Texas, was to be the pilot stage in a project that eventually would be used to monitor and control some 6,000 miles of border with both Mexico and Canada. In late 2006, Boeing was selected as the major contractor for the SBInet project. Although better known for their military weapon systems, Boeing’s Integrated Defense Systems Unit was made responsible for overall coordination of a massive system of towers as well as listening devices, motion sensors, cameras, and radar to be used to detect and help apprehend illegals crossing the border. In fact, the U.S. government chose to out- source the entire project to private firms; that is, they expected that contractors would design the program’s elements, build them, and then handle full oversight of their own work. In a nutshell, the system used a chain of 100-foot- tall towers that each scanned a 360-degree radius for a distance of 10 miles. Ground radar sensors also attempted to detect footsteps, bicycles, and vehicles. The first $20 million pilot phase, named Project 28 after the length of the part of the desert that it was supposed to cover, was to be completed by mid-June 2007. Boeing selected more than 100 subcontractors to build various components of the system, with its project managers maintaining overall control of the development process. Unfortunately, their structure was unwieldy, and the project was further compromised by the sheer number of distinct elements and technical systems Boeing was attempting to integrate