Uitenhage Airport Network Requirements

The Uitenhage airport has been upgraded to allow for the use of full-sized aircrafts. Due to poor planning, they have not yet implemented the airport's network infrastructure. ACSA (Uitenhage) has contacted our company to remedy the situation. The airport has the following requirements listed in no particular order of importance:

- A secure connection is needed between the Uitenhage airport and the PE Airport.
- The passengers regularly need internet access while waiting for their flight. You will need to create a way for them to have access and be billed for it.
- The airport staff also needs a network to communicate with each other. This network must support both physical PC's as well as mobile devices. The regular passengers must not be aware of or be able to access this network.
- The ground/tarmac staff needs a way to communicate with the tower and the pilots. This should be a secure system as well.
- A central location is needed in which to place all of their servers.
- Security personnel have all been allocated mini tablets on which they need to complete reports on any discrepancies they might find while doing their rounds.
- The airport also has a policy under which it provides a networked PC to all of the shops in the airport. This will provide the shops with an internet connection.
- The airport has also purchased 3 information touchscreen kiosks, which have to be placed at the locations indicated. These kiosks must connect to a central information server. They will be used to display adverts a well as updated flight arrival and departure times.
- The airport has a self-check in counter. This is used for passengers who only have hand luggage. If someone checks in, the passenger manifest for their flight must be updated.
- The airport needs to be a very secure area. As such, management has decided to implement video cameras to monitor all activity. All entrances to the airport should also be under constant surveillance. All security cameras should relay their feeds to a central server.
- The doors to the "Staff only" area should all be access controlled, from a central server.
- The airport manager has to make frequent international calls. He has asked you to find out if there are any technologies you can incorporate which may save them money on international phone calls.
- A new Remote Access Tower has been built on the far side of the runway. The servers in this
 building need connectivity to the servers in the main building. This connection must be a
 physical connection.
- In addition, the staff members in the Remote Access Tower must have secure radio communication with the airport manager.
- ACSA has also asked whether or not it would be possible to allow for future growth in network.
 This is an optional parameter and should not take precedence above any of the other specifications.