

## IDEA

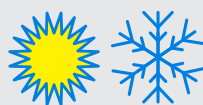
## TECHNOLOGY DEMONSTRATION OVERVIEW

**COMPANY**  
Selex ES

**TECHNOLOGY**  
Digital Building Operating  
System Solution (DiBOSS)

**DEMONSTRATION SITE(S)**  
Sun Building,  
280 Broadway, New York

**DEMONSTRATION PERIOD**  
February 2015 – February 2016



SYSTEM(S) INVOLVED

## HEATING AND COOLING



TYPE OF SAVINGS  
GENERATED

## DISTRICT STEAM AND ELECTRICITY

VENDOR'S POTENTIAL  
FOR SAVINGS

**10%**

SAVINGS ACHIEVED  
IN THIS DEMONSTRATION

**5%**  
Electricity

**11%**  
District Steam



## SAVINGS

### Technology Description

DiBoss is a digital building operating system solution, and provides recommendations for optimizing building operations based on weather forecasting and machine learning. The system functions over existing Building Management Systems, and provides access to a web based dashboard that provides trend logs and forecast information for building operations. Energy savings are expected for all systems with weather dependence and that operate within an existing BMS. The software offers real time commissioning start up and ramp down recommendations, user friendly customization with real time electric and steam gauges, and actual versus forecast electric and steam consumption.

### Optimum Facility Characteristics

- Operational BMS
- Engaged building operators

### Demonstration Results

Selex ES installed their DiBoss system in an office building over the existing Trane BMS, in February of 2015, with system training for staff taking place in March 2015. Weather normalized savings were demonstrated in the heating and cooling seasons for the district steam (11% savings) and electricity (5% savings) respectively. Baseline savings data was provided through utility energy reports and meter billing details.

### Recommendations for Implementation

- Effective training of building operations staff is critical for the success of this technology. DiBOSS works best when staff engage with trend data and act on recommendations provided by the dashboard.
- Effective at optimizing start-up and ramp-down of building as well as occupancy-based control of HVAC systems.
- Must follow IPMVP Option C Whole Facility and establish a statistically relevant baseline of utility bill data.

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