# How It Works:
# Supply Chain Security

**ELECTION** Systems & Software

ES&S works with leading security experts to create the most secure supply-chain possible — with rigorous inspections at every step — to provide accurate and reliable elections for our nation.

## VETTING

Every partner in ES&S' global supply chain must regularly undergo a multi-point, in-depth check for security, safety, reliability and adherence to stringent operating procedures.

> ES&S tabulation systems are **purpose-built,** which means we know and vet the manufacturer of 100% of the individual components.

## PRODUCT AUTHENTICATION

All electronic components are certified to Electronic Components Industry Association standards. These standards, developed to fight counterfeiting, are upheld with a 76-point audit of manufacturer and distributor quality management systems.

🔒 PHYSICAL SECURITY: ACCESS BADGES, CAMERAS AND 24-HOUR MONITORING

## ASSEMBLY

Trusted manufacturing partners inspect the components upon arrival; this includes using high-powered microscopes to look for irregularities.

- Security assessments are conducted on each of our manufacturing partners.
- Key manufacturing personnel have gone through federal background checks.
- All manufacturing partners are ISO-compliant, following highly regulated processes for quality management.

🔒 PHYSICAL SECURITY: LOCKED AND SEALED CONTAINERS, SEAL NUMBERS LOGGED AND VERIFIED DURING TRANSIT

## IMPORTING

**100%** of our shipping partners are Customs Trade Partnership Against Terrorism (CTPAT) certified—which is the U.S. Customs and Border Protection's highest level of cargo security.

CTPAT

- CTPAT is the Authorized Economic Operator (AEO) program for the U.S.
- All CTPAT certified distributors are required to demonstrate that their supply chains are secure from the point of origin to the point of distribution.
- Other critical infrastructure sectors, including defense and healthcare, trust and use CTPAT certified distributors.

🔒 PHYSICAL SECURITY: ACCESS BADGES, CAMERAS AND 24-HOUR MONITORING

## FINAL CONFIGURATION & VALIDATION

Before units are approved for delivery to customers, important steps take place:

- Our systems are tested by an independent, US-based laboratory that completely dismantles units to verify that the firmware on the programmable active components meets all specifications and is quality tested to our exacting standards.
- In Omaha, Nebraska, the final hardware is configured and the final end-to-end QA testing is conducted, which includes installing the certified software and firmware.

🔒 PHYSICAL SECURITY AT CUSTOMER LOCATIONS: ACCESS BADGES, CAMERAS AND 24-HOUR MONITORING

## DELIVERY & INSTALLATION AT CUSTOMER LOCATIONS

- For transit, tamper-proof seals are placed on truckloads, and access to freight terminals is restricted.
- Upon delivery to customers, the firmware is verified once more.

# Product Testing

**ELECTION** Systems & Software

## PRODUCT DEVELOPMENT
**We work from federal testing guidelines**, designing tabulation equipment to meet or exceed every requirement.

## ADDITIONAL SECURITY TESTING
We voluntarily sent tabulation equipment to be tested by independent cybersecurity labs such as **Idaho National Laboratory**, which works to improve the security of nuclear power facilities, electrical grids and other U.S. critical infrastructure.

## PRE-CERTIFICATION TESTING
We internally conduct every test described in the federal guidelines to ensure **zero defects** prior to applying for certification.

## FEDERAL CERTIFICATION

The Federal Test Program reviews:
- ES&S' application
- The test plan
- The test report

Following review, the Election Assistance Commission makes a decision on certification.

Federally accredited labs test tabulation equipment as described in the Federal Test Program. These stringent tests require:

### 1.5 million
consecutive ballot positions correctly read by tabulation equipment

### 48 hours of
consecutive environmental tests with no issues; if any issues, the clock restarts

### 3+ million
lines of source code reviewed

### Full security audit
of the election management software

ES&S has
## 25
federally certified voting systems

## STATE CERTIFICATION
Most states require a state code compliance review and approval by Secretary of State or state board, in addition to federal certification. **Some states require field tests of the equipment before certifying.**

**BOTTOM LINE:** These strict guidelines and exacting series of tests are developed for one purpose: to make sure systems perform as designed and certified.