



## **Introduction**

This document provides an introduction to the NATO SDIP-55 TEMPEST Standard.

The information applies to those NATO Nations, Commands and Agencies that use information technology (IT) products in communications and information systems (CIS) to process, store or transmit NATO information that is classified NATO CONFIDENTIAL or above.

Secure Systems & Technologies Ltd (SST) is an established, accredited and respected TEMPEST product manufacturer and test facility.

## **Current approach**

SDIP-55, Paragraph 7 quotes 'The traditional approach for TEMPEST approval provides for government supervision of evaluations to include testing oversight and technical reviews of both the TEMPEST Test Plans and Test Reports produced by a nation's TEMPEST evaluation personnel.' CESG, the Information Assurance arm of GCHQ, is the National TEMPEST Authority (NTA) for the UK.



## **Rationale and aims for change**

The introduction of the SDIP-55 scheme comes because rapid functional improvements in IT products result in a customer desire to use TEMPEST compliant versions of these improved products. The aim is to decrease the time required to provide formal Government endorsement to TEMPEST IT products which are compliant with the SDIP-27/1 Level A or SDIP-27/1 Level B screened room test standards.

## **Change to SDIP-55**

The NTA will appoint accredited TEMPEST test authorities who will manage the approval process for vendors products. NATO is adopting the new procedures that will allow TEMPEST product vendors such as SST to rapidly qualify their new TEMPEST products and provide NATO with the latest in technology.

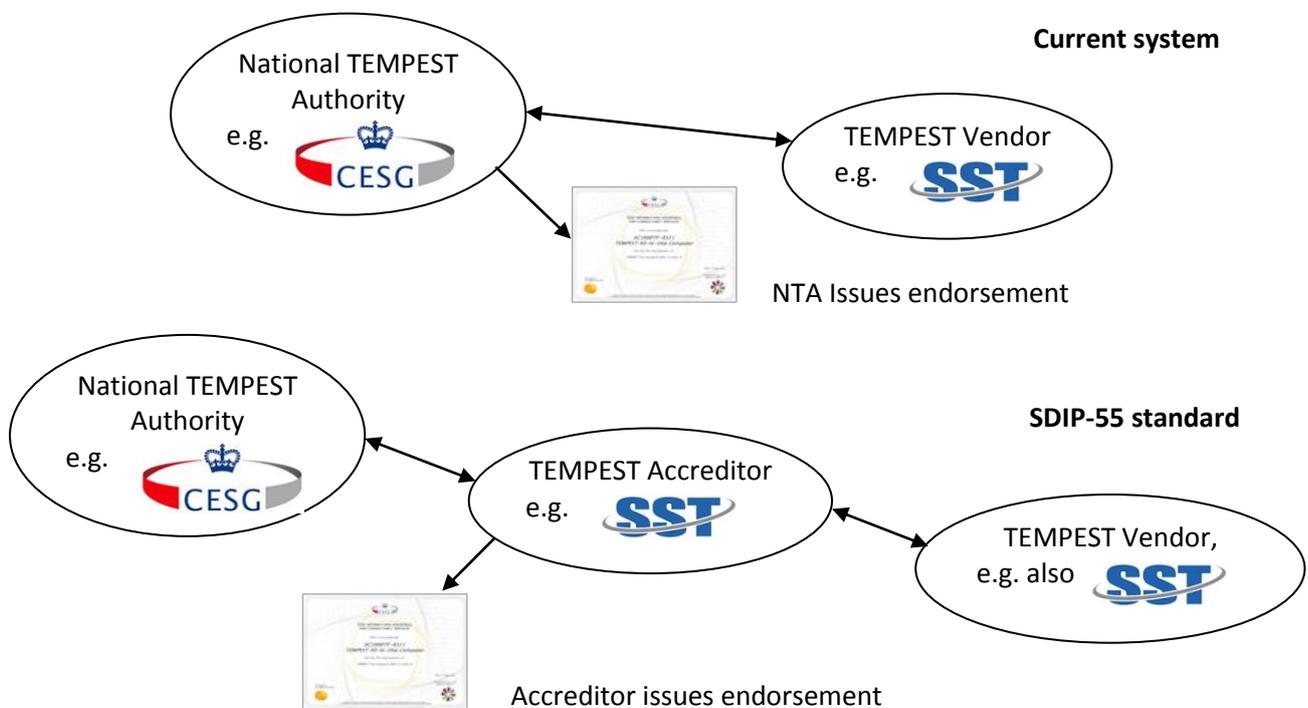
The responsibility for TEMPEST compliance of individual products will be divested to accredited TEMPEST accrediting authorities as the NTA of member countries move to overseeing the mechanisms of testing rather than ratifying individual products. These accredited testing authorities will ensure that individual products from vendors meet the requirements of the SDIP-27/1 standard. SST will act as both an TEMPEST accredited authority and as a manufacturer and vendor of TEMPEST approved products.

## To conclude

The reduction in delays for development of TEMPEST products may be of benefit to customers but it does come with a 'health warning'.

The change in the role of the NTA in member countries to an 'oversight' position makes it more essential than ever to select products from trusted suppliers, such as SST, with an impeccable history and approach to TEMPEST.

### Overview diagram of the process changes



## An introduction to SST

Based in Gloucester, UK, Secure Systems & Technologies Ltd (SST) designs and manufactures TEMPEST, EMC-rated, Military Rugged, Encryption and Communications Security equipment for Military and government organisations throughout NATO and Europe.

Operating from a purpose built CESG accredited UK Government approved facility with experience spanning three decades combined with expertise in training, off-site mobile platform testing, equipment installation, consultancy and programme management SST is uniquely positioned to support customers on all aspects of TEMPEST.

# NATO SDIP-55 TEMPEST Standard



With in-house TEMPEST, EMC and Environmental testing capability as well as Prototyping and Manufacturing facilities, SST can provide fast and reliable turn-around times from design through to manufacture and installation.

As Subject Matter Experts, SST provides consultancy, training and testing services including TEMPEST and environmental certification.



## **TEMPEST Products:**

SST specialises in the design, manufacture and test of TEMPEST products, from office-based IT equipment through to fully deployable systems and vehicle components. With the introduction of SDIP-55 the items are accredited or Endorsed by SST on behalf of CESG.

## **TEMPEST Services**

SST also specialises in the provision of TEMPEST Services, acting as TEMPEST Design Authority, TEMPEST Consultants and providing TEMPEST Training and TEMPEST Testing Services for customer facilities, platforms & products.

With a high percentage of engineers and TEMPEST industry specialists, including the UK's largest commercial TEMPEST test facility, SST has built an enviable reputation, providing consultancy, training and testing services for TEMPEST and environmental certification.

## **TEMPEST Design Authority and consultancy**

SST can provide confidential consultancy throughout a TEMPEST project.

From writing TEMPEST control and test plans to formal testing. Particular value can be gained when we're engaged at an early stage in a programme for an appreciation of the TEMPEST issues.

## **Offsite TEMPEST Platform Testing**

Under SDIP-55 accreditation, SST is certified by CESG to perform TEMPEST platform testing.

With the benefit of many years platform testing experience SST employ their dedicated mobile test equipment either on a customer site or in conjunction with EMC platform test facilities.

## Onsite TEMPEST Product Testing

SST TEMPEST and EMC Test Facility Personnel have many years experience performing acceptance testing on products and mobile platform installations. SST will often work alongside equipment manufacturers for an appreciation of TEMPEST aspects during initial design stages, often providing an initial assessment of TEMPEST performance to highlight areas of concern before formal testing commences. With a unique position in the UK, SST is also a CESG accredited manufacturer of TEMPEST products with a deep appreciation of the manufacturing process.



## TEMPEST Facility (Building) Testing and Installation

SST can assist when it comes to the requirements of TEMPEST Zoning (SDIP-28) and Installation (SDIP-29), from the initial discussion on taking TEMPEST into consideration, through Zoning Procedures, requirements assessment, facility design to equipment installation. In addition to SDIP-29 (Facility Design Criteria and Installation of Electrical Equipment for Processing Classified Information) SST also incorporates requirements of JSP440 and JSP480.

## TEMPEST Courses

SST offers a number of comprehensive TEMPEST courses that can be tailored to meet customer's exact requirements, from basic "Introduction and Awareness" to "TEMPEST Testers Advanced" course. The full range is shown in detail on the [SST Website](#).

## Accreditation

SST operates an accredited Secure Site with personnel cleared to SC, DV and NATO Secret level.

Qualifications include:

- TEMPEST Test facility accredited by CESG
- Advanced Category 4 TEMPEST Testers, fully accredited for SDIP-55
- Registered on the UK Defence Contractors List, No: 22839
- NATO Basic Ordering Agreement (BOA), no. 9092
- Quality EN ISO 9001:2008 Certificate: FM 26798
- Approved Crypto Custodian

Additional resources: [NATO Information Assurance Pages \(TEMPEST\)](#)

[TEMPEST Standards SST site](#)