

IT SECURITY - A BUSINESS OPPORTUNITY

*An introduction for the IT industry*





# IT security

## - *the opportunity for vendors*

**a**s a supplier either of secure information technology products or of products that bring security features to general systems, you have a potentially limitless market.

Most companies and organisations in every sphere of industry now depend on IT for effective business management. At the very least, small businesses use PCs on a daily basis for correspondence and record-keeping. Larger national and international organisations run huge computer installations, electronically exchanging a variety of information, locally and globally, for fast and efficient operations.

In the UK, Europe and beyond, information technology is essential for businesses that want to develop and maintain their competitive edge. But it has its drawbacks: computerisation introduces security threats that simply did not exist before.

Security is an issue that user companies cannot afford to ignore, and in every country the security concerns are the same.

User companies must preserve the availability, integrity and confidentiality of their business data. If systems are not secure they risk corruption or loss of assets. If they cannot be accessed, business activities may be severely curtailed. If competitors access a user company's data, it may even be put out of business.

User companies' security fears increase as networked distributed systems become more widespread. Security of these vulnerable systems depends less on traditional administrative procedures and physical safeguards and more on technical IT security measures. With every technological advance, security becomes more complicated.

With so much vital data at stake, user companies are justifiably wary of making the wrong IT purchasing decisions when it comes to selecting secure systems and software.

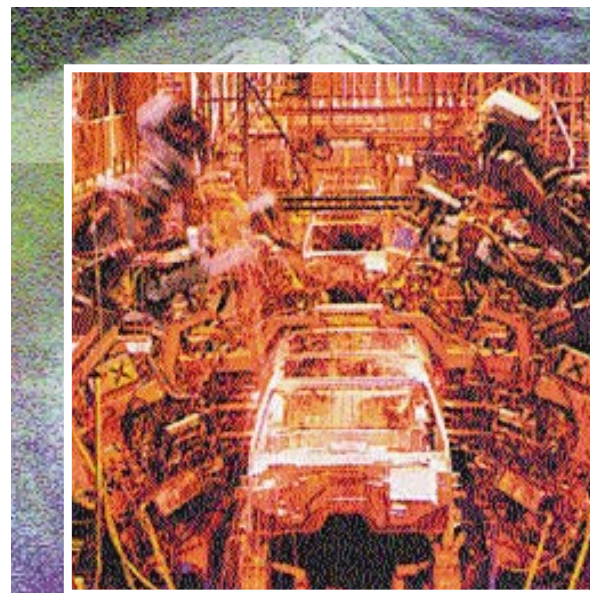
Theoretically at least, the field is yours. But you are one supplier among many. Customers can pick and choose secure products from a number of

*“As an engineer, the evaluations do lead to better product design since the process makes the engineers study their designs more rigorously when writing the documentation.”*

Andrew Calvert, principal engineer,  
GEC-Marconi Secure Systems

sources. If they don't have a choice of supplier, they can develop secure systems and software themselves, and many do.

You would naturally prefer them to buy from you. You offer reliable, technologically advanced products. You are able to demonstrate these products' security and capabilities successfully. You can prove their





relevance to your target markets. And you offer a number of additional services including support, consultancy, bespoke development and installation.

But you still have a problem. Though your products, services and experience are unrivalled, your potential customers can't see the difference between you and the competition. They may like your products and want to believe what you tell them - but they still won't commit themselves to a decision.

*"Our approach in future as prime contractor will be to specify secure components such as operating systems, and to source these from other suppliers".*

Noel Hudson, RAF account manager, Siemens Nixdorf.

You know your products provide the level of security your customers need, and you know they are a match for any on the market. To convince

potential customers let a reputable, internationally recognised evaluation and certification body prove it.

ITSEC certification will be recognised by all user companies, at home and overseas. It will assure them that your security claims have been independently verified. It will show them how your products measure up to your competitors' offerings. And it will provide you with the unbiased seal of approval on which so many purchasing decisions depend.

## IT security - the importance to users

**C**omputer security is of greater importance to commercial and government organisations than ever before. It is bound to be: never before have they been so dependent on their computer systems for information management, business development and growth.

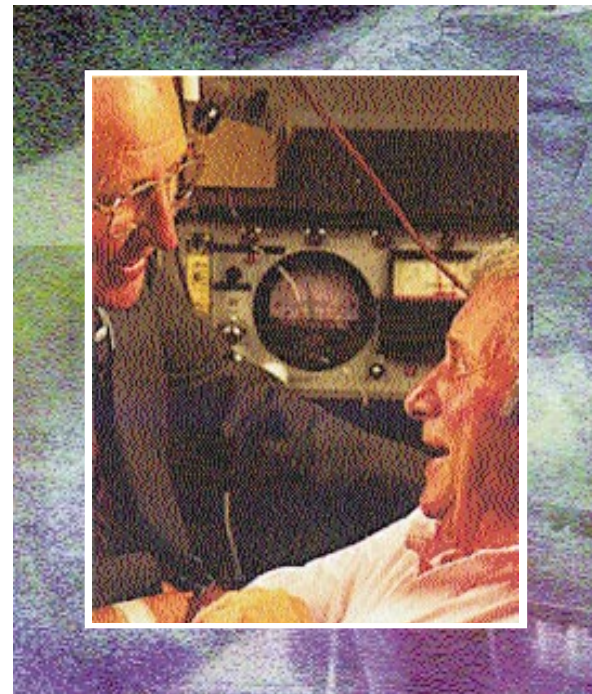
The term "security" is a broad one and covers several issues. Availability is crucial. If information is not accessible at the right time to the people who need it, it is little more use

than if it had been corrupted or stolen. Availability can easily be affected by inadequate security, whether or not malice is involved.

Information can become equally unusable as a result of losing its integrity. It may not even have been 'tampered with' in any illegal sense: if an untrained, unqualified data entry assistant is given carte blanche to adjust a vital database, loss of integrity becomes a real possibility. Obviously, data should also be protected from hostile or malicious intruders who

would delete or corrupt it, or those who would steal it for their own commercial benefit.

More often, though, security is jeopardised because vendors have not



taken enough care with product development and have prematurely released inadequately tested systems or software that fails at the first opportunity. Products may well be sold as 'secure', but they do not promote security if they do not work.

Most user companies realise information is too important as a business asset to be entrusted to chance. But the size and scope of some operations make the pitfalls hard to identify. Complicated network structures, vulnerable international EDI links, unstaffed lights-out processing operations and uncontrolled purchasing habits all represent chinks in the armour of even the most security

conscious user organisations.

Information technology is essential to the growth and prosperity of international business. Many companies recognise the enormous threats faced daily by their IT installations - both from inside and outside their organisations. Some have already spent considerable time and effort on developing comprehensive formal IT security policies. Others have instigated sophisticated evaluation procedures for both staff employment and product purchasing.

The last thing they need is unintentional sabotage by their suppliers. So they ask questions such



as: are this product's security claims valid? Is there a comparison of reports for this and competing products that enable their easy comparison? And can vendors substantiate their claims, or do they expect us to accept them at face value?

They will be reassured by the unbiased award of an ITSEC Certificate.



## The UK ITSEC scheme - *what it is and how it works*

 The Information Technology Security Evaluation and Certification Scheme is designed specifically to give user companies an easy means of assessing security features of various hardware and software products.

The UK Scheme Certification Body is operated jointly by the

Department of Trade and Industry (DTI) and the Communications-Electronics Security Group (CESG), and brings together several organisations that are closely involved in IT security and integrity issues.

The Certification Body, has licensed independent organisations to conduct third-party product assessments.

*“The use of personal computers within the Ministry of Defence or within a bank is practically identical. Yet so far, the commercial sector has shown little understanding of the importance of security assurance.”*

John McIntosh, director, PC Security.

These organisations, known as Commercial Licensed Evaluation Facilities (CLEFs), are monitored both by the Certification Body and by NAMAS, the National Measurement Accreditation Service. NAMAS inspection ensures the independence of evaluation findings and monitors the quality and thoroughness of the work performed by CLEFs.

The current CLEFs are listed on page seven. ITSEC does not limit the commercial freedom of vendors or CLEFs. You can submit individual products and systems for evaluation by CLEFs as you wish. You may choose the level to which a product will be evaluated and choose which CLEF you would like to perform the work. There is

no fixed price structure: you and your chosen CLEF have complete freedom to negotiate fees and timescales for product evaluation.



## Evaluation: *what happens?*

**O**nce you have obtained general information about the ITSEC scheme (see addresses opposite) you may wish to contact a CLEF or other security specialists to arrange a small-scale pre-evaluation consultancy programme for your product. In this case, they will examine material you have already prepared as part of your usual product development process and will compare it with the information required for evaluation.

They will then report on the suitability of your existing material for full evaluation of your product to an agreed target level of security. A CLEF will give you a cost estimate for evaluation.

This allows you to experience preparing for an evaluation and working with a CLEF while limiting initial costs. Taking things further, if you decide to go ahead with full evaluation, the CLEF will prepare a work programme on your behalf and will inform the Certification Body of the proposed work. The Certification Body will confirm that the work proposed is thorough enough to meet the requirements of the target level you have chosen.

Once formal evaluation begins, an evaluation team will carefully assess your product documentation and source code (for higher security levels) against the requirements of ITSEC for your target level.



When this is finished the CLEF team will submit its findings to the Certification Body, which will then award your product a certificate, if appropriate.

Strictly, certification only applies to the version of the product evaluated. If you later enhance or modify your product, modifications may have to be examined by the CLEF before certification can be extended to cover the later product version. The Certification Body and the CLEFs have devised evaluation methods to achieve cost-effective certification maintenance through product upgrades.

# Benefits of product certification: *a summary*

## ***Market expansion:***

By gaining ITSEC certification you will prove to customers that your product reaches recognised security standards. Certification may also bring it to the attention of security-dependent organisations - military or defence, for example - who previously would not have considered installing it.

## ***International recognition:***

ITSEC is widely acknowledged within Europe and elsewhere, reducing the need for your product to be evaluated for each of these countries.

## ***Improved development processes and quality control:***

The discipline required when working towards certification often highlights related or unrelated administrative procedures that need streamlining or standardising. You may wish to implement a quality assurance programme at the same time as undergoing ITSEC evaluation. Security apart, this will bring

widespread benefits to your organisation as a whole.

Even if you don't choose to implement such a programme, working for ITSEC certification may provide valuable insight into ways in which you could improve the development process of your products.

## ***Quick, cost-effective reassurance of customers:***

ITSEC evaluation and certification takes a matter of months and is relatively inexpensive. It provides an invaluable tool to help you convince security-conscious customers that your product meets their security needs.

## ***Essential third-party endorsement***

Successful sales organisations have appreciated for decades the value of unbiased opinion. It can make all the difference to uncertain potential buyers and may well influence their purchasing decisions.

Where to go for more information about ITSEC:

*Head of the Certification Body  
UK IT Security Evaluation and  
Certification Scheme  
PO Box 152 Cheltenham  
Gloucester GL52 5UF  
Tel: 01242 238739*

Information about ITSEC is also available from the CLEFS:

*Admiral Management Services Ltd (CLEF)  
Kings Court 91-93 High Street  
Camberley Surrey GU15 3RN  
Tel 01276 686678  
VernerParkeor Tom Craig*

*EDS Defence Ltd (CLEF)  
Wavendon Tower Wavendon  
Milton Keynes Bucks MK17 8LX  
Tel 01908 281177  
Colin Foster or John Robinson*

*Logica UK Ltd (CLEF)  
Cobham Park Downside Road  
Cobham Surrey KT11 3LX  
Tel 01932 866748  
David Cherrill or Andrea Cumming*

*Secure Information Systems Ltd (CLEF)  
Sentinel House Harvest Crescent  
Ancells Park Fleet  
Hants GU13 8UZ  
Tel 01252 778837  
Tony Fisher*

*Data Sciences UK Ltd (CLEF)  
Meuden House Meuden Avenue  
Farnborough Hants GU14 7NB  
Tel 01252 544321  
Bob Finlay or George Mullen*

UK **IT***sec*



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