



Integrated **risk management**  
for your entire **business portfolio**

## Product Feature Listing

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**ABS Consulting**  
AN ABS GROUP COMPANY



## **THE S I S - The Health Environment and Safety Information System**

With 15 years of history, THE S I S BowTie™ is the original and market leading 'BowTie' concept tool for analysing and representing the management of hazards in the modern business and operational environment.

THE S I S is owned, developed and managed by ABS Consulting Ltd (ABSC). The THE S I S technology concept is shared with a major international oil and gas operating company.

### **Who is ABS Consulting?**

ABS Consulting is an affiliate of ABS, a leading marine and offshore classification society founded in 1862.

ABS Consulting is the worldwide, multidisciplinary industry leader offering risk, safety, integrity, quality, security and environmental management services for the oil, gas, petrochemical, transportation, nuclear and commercial sectors. The business employs over 1,400 employees in over 30 countries, managed across four key geographical regions

- Americas – centred in Houston
- Asia Pacific – centred in Singapore
- Middle East (including Africa) – centred in Dubai
- Europe – centred in Cheshire, UK.

ABS Consulting continually develop and support THE S I S as a tool for technological risk management services. As practitioners of the BowTie method and risk management across global industries we have had the opportunity to adapt THE S I S to a variety of sectors and disciplines, ensuring the product retains its rightful position in the market.

### **What Versions Does THE S I S Come In?**

THE S I S is available in two primary formats:

- THE S I S 6 Standalone – the main stay, PC installed product which has evolved over 15 years of ownership and since its conception
- THE S I S 6 Enterprise – a fully Web based version, designed and built for corporations with large asset bases who wish to manage their hazards in an intelligent and consistent manner

Case files can be exchanged between both.

In each instance THE S I S is fully provided for ie. all components and features are made available, as standard, with no extra charges.



### What About Licencing, Software Support and Maintenance?

Based on our experience over years of operation and development, we have designed the licencing regime to be simplified and financially favourable. There is no requirement to engage in a separate contract for product support, maintenance and updates as this is provided as standard along with the licence.

Licence costs are discounted based on numbers required. Further discounts are available where training and consulting are requested.

### Who is Using Thesis?

ABS Consulting and its customers are using THESIS in the following sectors:

- Global oil and gas industry
- Mining
- Aviation sector
- Shipping, transportation and logistics
- Business continuity management and multi-agency emergency response
- Security risk management
- Medical research
- Government

### Features of Version 6

THESIS BowTie Version 6 was formally released in December 2010. The key features of THESIS are listed below.

User Interface	
Easy by Design	The basic layout and interaction within THESIS has been retained over the years, as user feedback has confirmed the simplicity is ideal. The basic view (which can be adjusted) is a single split screen with Case Tree view on the left and Graphic view on the right. Additions and edits are possible without the need for other view formats and the program has a high degree of tolerance regarding the manner of data entry.
Menus / Icons	A simple and traditional menu structure with icons is maintained, albeit significant development work has been undertaken.
Terminology	The default language is English. Users are permitted to change the core terminology as they see fit. Other language functions and options are continually being added.
Wizards	Basic start up and custom reporting wizards are available within the program. The number of steps are minimal for speed of use.
Help Functions	A quick start guide and full user manual is available on board, with no internet connection necessary.
Ergonomics	Most functions are available through simple mouse clicks. Over time we have recognised that bulk additions and edits can be cumbersome in a GUI based package. To this end, other data manipulation and import/export functions have been designed and incorporated. Ergonomic and data handling is a continuous development area.
Templates	Users can readily create templates with core data defined and loaded eg. the RAM, document libraries, LOPA data, alternate terminologies etc.
Risk Assessment Matrix	The RAM will tolerate upto a 10x10 matrix with upto 10 consequence categories. This is twice the capacity of what is commonplace. A full colour palette is available and copy/paste functions reduce the burden of replication during configuration.
Preferences	A number of settings are available to control a number of user functions including: view functions, LOPA and Custom Report accessibility, backup schedules, and dialogue box preloading functions.
Security	A detailed module allowing the Case File owner to set a series of standards for how the data is controlled, reviewed and updated.



Data Manipulation	
Copy & Paste	The Copy/Paste function can be applied at any level in the BowTie and across other BowTies. Prior to pasting the user has the option to be selective on which nodes he wishes to include as not all components maybe desirable.
Usage Screens	Originally intended as providing statistical information, the Usage Screens have been adapted to afford users the ability to undertake swift edits in an onboard spreadsheet format either as single record edits or multiple edits. This can include simple text changes or group updates eg. for effectiveness rating.
Link Screens	As an extension of the Usage Screens is it possible to undertake bulk linkage eg. assignment of tasks to common controls.
Find & Replace	A detailed and powerful function which allows search and replace across the case file as a whole, or by grouping. With similar functionality to the Usage Screens, updates can be single or bulk. The user can also synchronise the record(s) with the BowTies which will self extract and highlight nominated records.
Templates	Users can readily create templates with core data defined and loaded eg. the RAM, document libraries, LOPA data, alternate terminologies etc.
Shortfall and Action Tracking	An interface window to manage the status of all Shortfalls and Actions within the Case File. This window allows filtering and editorials of data from a single view.
Import / Export	The ability to incorporate data from Excel based spreadsheets has been developed.
Renumber/re-order	Simple functions which allow re-ordering and renumbering of node data eg. following large copy/paste exercises or mass updates.

Graphics	
Platform	THESIS 6 uses a completely new operational platform for graphics, based on Flash Media. Flash Media is widely used for online video graphics and was selected for its performance and superior image quality both on screen and more importantly in printing.
Show/Hide	Users have the ability to temporarily hide BowTie components to allow for ease of navigation, where particular focus is required.
Viewing Options	<p>Multiple viewing options are available for the display of BowTie functions. These include display of detailed data, based on 'hover functions,' toggling to: show control effectiveness, control types, criticality rankings, linked activities/tasks, linked accountable/responsible persons, linked Safety Critical Systems, linked documents, and status of ALARP Acceptance Criteria.</p> <p>View options permit the changing of font size and type as well as scaling of image boxes to fit additional text.</p>
Expand/Collapse	Multiple options to automatically display different levels of expanded or collapsed state.
LOPA	LOPA is unique to THESIS. Through simple toggling it is possible to display the 'LOPA BowTie' with quantitative data and Acceptance Criteria visible.
Instant Screen Captures	The 'Copy BowTie' function allows for general or specific screen grabs to be taken for pasting images into other media such as Microsoft PowerPoint, Word etc.

## Portable Formats

Portable (HTML) BowTies	By far the most popular and unique feature of THESIS. It is possible to create 'portable files' of Case File Hazards in HTML format. They contain all the attributes of the Hazard including linkage and a THESIS like menu bar. The details are available in both tree and graphic format. The formats have gained particular recognition by non-THESIS users such as a client's contractor, regulator etc. They also serve to avoid excessive printing and can be electronically attached to the 'Safety Case.'
Portable (Adobe) BowTies	With the deployment of the new Flash Media graphics engine, a second portable format is now available. This has all the functionality of the HTML version with the added benefit that the data is driven by our own engine and does not have some of the restrictions imposed by Internet Explorer, namely security popups, performance and limitations on printing. It is necessary for the user to have either THESIS or our portable player for this to work. The portable player is freely available for distribution by the user or is available from ABS Consulting.

## Printing

Case Tree	Export of Case Tree status to HTML format for high quality image printing or electronic transfer by e-mail.
Reference Tree	Export of Case Tree status to HTML format for high quality image printing or electronic transfer by e-mail.
BowTie	Direct printing of the BowTie is available as an inbuilt function within THESIS and from the portable player. The printing of the image will autoscale to suite the selected paper size from conventional printer to plotter. Headers, footers and logos can be added/manipulated at this stage. For large images eg. A0, the portable format (above) will allow easy transfer of images to external print shops.

## Reporting

Standard Reports	THESIS contains some 50 standard, hard coded report templates (including 2 LOPA reports) available for immediate use. THESIS reports have been built up over time and are considered to represent the bulk usage needs. The reporter can be filtered to show different data. There is also a search function. ABS Consulting may make additions and modifications to these reports for incorporation by the user.
Custom Reporter	Where the existing standard reports are not sufficient (eg. unsuitable layout, sort order, different data fields etc), then the user can activate a simple 3 step report wizard to quickly generate a highly flexible, new, interactive report. The reporter allow for editorials to terminology, filtering, sorting, layout, fonts, colours etc.
Report Formats	Report formats for Standard and Custom come in four formats: direct printing, Adobe report format, Excel report format and export to 'flat data table.'
Import/Export	Users who have generated Custom Reports which would be useful to their colleagues can export and import other templates. ABS Consulting may also create new templates for user importing.

## Excel Import/Export

Export	<p>Templates are provided within THESIS from which Excel style data can be downloaded from the THESIS database. These Templates include HAZID and LookUp Data. In the future more templates will be added.</p> <p>Once downloaded (with or without existing data), the user can then populate the datafields from within Excel, either for the purposes of bulk upload or because a workshop session is being facilitated in this mode.</p>
Reference Tree	<p>Once the Export template is loaded it can be imported into THESIS to create a BowTie case file.</p> <p>The Import / Export function provides a whole new dimension to the user interface of THESIS, allowing database/spreadsheet type data to be handled and incorporated.</p>



## LOPA

LOPA Module	The LOPA Module allows a simple migration of BowTie components based on Threat:Consequence pairing. The data is handled in a single form dialogue page where all the BowTie components are displayed and data assigned.
Initiating Event Frequency	Users can attribute IEF data to Threats in decimal or exponent form, via LookUp tables.
Enabling Factor/ Conditional Modifier	Users can attribute these factors against Threats and Consequences in decimal or exponent form, via LookUp tables.
Probability of Failure	Users can attribute PFD data to controls, by direct entry in decimal or exponent form.
Consequence of Failure	Users can assign CoF data by direct entry.
Acceptance Criteria	Users can assign AC limits in decimal or exponent form, via LookUp tables. The LOPA calculation will run and assess the level of residual risk versus the Acceptance Criteria to generate a Pass or Fail.
LOPA Output	Outputs are visualised in 'LOPA BowTies' or via the reporting module.

## Thesis Enterprise

THESIS Enterprise	Fully Web based version of THESIS which is configured for SQL server.
Check In/Out	A facility which allows the transfer of Case Files between Standalone and THESIS Enterprise. This functionality is used when working in an environment with no or poor connectivity to the Enterprise server.
Repository	A staging post for the business asset hierarchy where all the Case Files are stored and managed.
Inheritance and Cascading	A core feature of Enterprise is the ability to create Parent and Child data relationships across Case Files. Changes to Parent files can be cascaded to all Child files. Data not applicable at a Child level can be hidden using Justification fields.
Security	In addition to standard Case File data security, the Enterprise administrator can control access to the Repository functions also. This can be done via login names/ passwords or via a Single Sign On using Active Directory. The security features are layered using the asset hierarchy.

Vendor	
Market Presence	ABS Consulting employs some 1,400 staff engaged in the fields of safety, risk and integrity management. The business is an affiliate of ABS with a collective presence in some 200 countries and 150 years of operational history.
Sustainability and Experience	The global presence and track record serve to demonstrate our experience and sustainability. ABS Consulting regularly present the THESIS methodology at conferences and seminars (IOPC, ASSE, UKOPA, IADC, ACI, AmCham etc). THESIS itself is 15 years old in 2011, a track record making it the longest standing and strongest branded product on the market.
Resellers	With the global presence of ABS Consulting, the use of reselling agents is not significantly promoted, however, we do recognise that in some geographic and market sectors there is added value in the use of such affiliates to support specific initiatives. We are willing to receive enquiries from reselling agents.
Support and Maintenance	This provided as part of the licence. No additional cost or contract is required.
Version Functionality	There is no 'lite' version of THESIS. All components are included as standard with no hidden charges.
Development	<p>We manage a low cost model development team with Microsoft certified programmers. The development team work on other safety and integrity development projects from a software development and engineering delivery perspective, providing a dimension to THESIS development beyond that of simple coding.</p> <p>There are specific development plans for THESIS which currently span into 2012. Details will be posted on the Web site in due course. The THESIS team will willingly look at bespoke modifications also.</p>
Training	Training in THESIS and other risk management techniques is a core functionality. We have conducted THESIS training globally and offer bespoke training at client locations and public training through the ABS Academy. ABS Consulting offers a full global training schedule with a client listing of over 25,000 persons.
Help Desk	The Help Desk is centred in the United Kingdom. We have local (in house support) operating in the UAE, India, Houston, Knoxville, Singapore, Brasil and Chile. Non ABS Consulting support is available via our agents in Australia, Switzerland and Manila.
Consulting	HSSE management system consultation is core business in addition to training. We have consulted using THESIS techniques on projects ranging from \$5k to \$400k.