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Policy Administration Systems for General Insurers in Europe 2011

This authorised reprint contains material excerpted from a recent Celent report profiling and evaluating 40 different policy administration systems. The full report is 250 pages long. This report was not sponsored by IDIT in any way.

This reprint was prepared specifically for IDIT, but the analysis presented has not been changed from that presented in the full report. For more information on the full report, please contact Celent (www.celent.com or info@celent.com). Reprint granted to IDIT.

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Executive Summary

This report is part of a series of reports on policy administration systems (PAS) in Europe, the United States, and Asia, and profiles many of the general insurance administration systems available in Europe today. An upcoming report will cover European policy administration systems in the life insurance industry.

This report is the fourth in Celent's biennial looks at policy administration systems available to insurers in Europe. Since the first report in 2005, activity level has remained high among both insurers and policy administration system vendors. In the two years from January 2009 to January 2011, over 130 insurers licenced a new policy administration system.

This report profiles 40 policy administration systems in use for general insurance, with 20 full profiles and 20 limited profiles.

Several of the profiled vendors have issued a major new release since 2009 that: upgraded their technology platform; broadened their range of functionality; or did both. Essentially all vendors have made a major investment in enabling their solution to work in an insurer's service-oriented architecture (SOA) environment. Many solutions have also made important advances in usability and personalization—with benefits for new and experienced underwriters and service representatives. System administration capabilities for configuring products, rules, workflow, document management, and user interfaces have also improved—although, overall, these changes have occurred at a more modest pace than improvements for end users.

Policy Administration Systems: Definition and Functionality

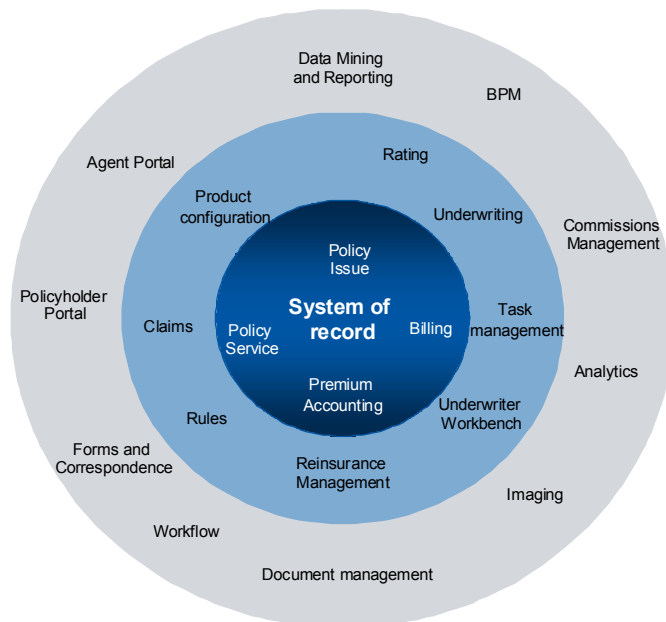
Definition

In one sense, the definition of a policy administration system is very simple: it is the system of record for all policies an insurance company has written. At this most basic level, a policy administration system is a repository of policy-level data related to objects of insurance, coverages, conditions, exclusions, duration of the policy, endorsements, beginning and end dates, and so forth. A permanent policy record is created at the time a policy is issued and includes the complete history of the policy through renewal, termination, cancellation, or reinstatement.

Core Processes

In actual practice, an insurer uses a policy administration system—either by itself or closely integrated with specific point solutions—to execute a number of core processes, and relies on several types of supporting capabilities, as shown in Figure 1.

Figure 1: The Elements of a Policy Administration System



Source: Celent

There are four core processes, as shown in the center section of Figure 1.

- **Product configuration:** Specifying the rates, rules, and forms associated with a specific product or line of business.
- **Rating and underwriting:** Rating is the process of calculating the rate that an insurer's pricing algorithms indicate should be charged for a specific submission. (Rating for all but the most complex risks is normally done by a rating engine, which may or may not be a completely integrated element of a policy administration system.) Underwriting includes rating as well as the activities of modifying rates, quoting, negotiating, and issuing or renewing a policy.
- **Policy service:** These are the activities that begin with issuance of a new or renewed policy and continue through the life of the policy, including endorsements, midterm adjustments, cancellations, etc.
- **Premium accounting:** Calculating the gross and net written premiums as well as the earned premiums associated with a given policy; for use in financial reports, billing, reinsurance, commissions, and other systems.

Supporting Capabilities

A policy administration system will also have five supporting capabilities.

- **Data exchange and integration:** Sending and receiving data to other internal and external systems at any point in the policy lifecycle (from configuration through termination/cancellation). Methods include offering and consuming services through EDI messages and more recently through Web services within an SOA framework, as well as a wide variety of other means including application programming interfaces (APIs) and other connectivity methodologies.
- **Rules and workflow:** Designing, managing, and executing business rules (attached to products or processes) and workflow (person:person, person:system, system:system) during any activity or process. In a more modern policy administration system, rules (especially) and workflow (perhaps) will be externalized from the core code and from the presentation (user interface) layer.

- Document management: creating, managing, and using a broad variety of documents, including policy content, forms, and correspondence.
- Reporting: Designing, storing, and accessing reports ranging from simple lists to multidimensional calculated variables. In general, reports are used to monitor activities by a user and by all levels of management.
- Analytics: Using various forms of statistical analysis to identify and present patterns of relationship and causation which an insurer can use to improve such functions as pricing, underwriting, and claims.

With the exception of data exchange and integration (which is inherently a requirement of any policy administration system), each of the other four supporting capabilities may be performed by a policy administration system itself; alternatively, the policy administration system may access other point solutions, or it may employ some combination of PAS and other point solutions.

Advanced Functionality

A good modern policy administration system will provide most, although not necessarily all, of the advanced functionality. (Note: Each full profile in this report has a table summarizing whether the policy administration system in question offers these advanced functionalities, and if so, in what manner and in what form.)

- Midterm adjustments: Flagging when an out-of-sequence endorsement is made, and providing the ability to construct and calculate premiums for the corresponding in-sequence set of endorsements.
- Automated underwriting (new business): Using rules and scoring methods to automate some (or more rarely all) of the tasks and activities from submission, quick quote, rate, quote, bind, and issue.
- Automated renewals: Using rules and scoring methods to automate some (or, more rarely, all) of the tasks and activities in renewing a policy.
- Premium and billing accounting: As described above, with the expectation that the policy administration system itself performs the calculations and directly feeds the receiving systems.

Additional End-to-End Components

Celent has limited the definition of a policy administration system to include a set of core processes and key supporting capabilities. But vendors don't limit themselves in the same way, and many have attempted to build out some or all of the end-to-end components that an insurer might need. Some insurers are just looking for a best-of-breed PAS to work with other core systems already installed, but, more commonly in Europe, insurers may be looking for vendors that can offer solutions for parts of their insurance operations.

Some of the additional end-to-end components defined here are also listed as core processes of the policy administration system. This is not a contradiction; a vendor might bundle a component with its PAS (for example, a billing system), but also consider it (and also sell it as) a separate, stand-alone product. Alternatively, a vendor might provide a basic level of functionality in one area, but also have an upgraded, higher cost product or an ISV partnership with a different vendor to provide an advanced solution (e.g., rating).

(Note: Each full profile in this report has a table summarizing whether the vendor in question offers these additional end-to-end components and whether the components are part of the base offering or sold as a stand-alone system.)

- **Product Configuration:** Also a core process of a policy administration system, product configuration as a component might have robust tools for managing content (forms) and rules throughout the lifecycle of a product.
- **Rating:** A stand-alone rating engine should be capable of handling complex pricing algorithms, and should integrate easily with various policy administration systems.
- **Underwriting:** Like rating, underwriting has a place both inside and outside of the PAS. Stand-alone underwriting systems give an underwriter a robust underwriting desktop and can manage complicated workflow between multiple systems.
- **Billing:** A billing component will support a broad set of billing methods, such as direct and agency bill, as well as various present and payment options, and configuration capabilities.
- **Commission Management:** A commission system calculates, reports, and tracks compensation structures and commissions payable to producers. It needs to integrate with several

systems to handle this effectively, but a true system can manage more complicated commission rules and do better incentive planning.

- **Reinsurance Management:** Insurers that just need basic tracking and gathering of reinsurance data will typically be satisfied with adding a few fields to their policy administration system. A full reinsurance component should support the reinsurance aspects of underwriting and claims, with a strong premium and commission calculation engine.
- **Business Intelligence/Analytics:** Most systems have some form of reporting. A true BI/analytics tool allows the management of data marts, detailed ad hoc reporting, customized dashboards, and complex data analysis—not just for the policy administration system but for all an insurer's data.
- **Claims Management:** A fully functional claims system will record and support all steps in the adjustment process from first notice of loss to final settlement. The claims systems will exchange data with a broad set of internal and external systems as well.

Report Methodology

Criteria for Inclusion

Celent's objective has been to include in this report as many as possible of the leading general insurance policy administration systems being used or actively sold to European insurers. In a few cases, vendors have not been included in this report at their request.

This report contains two types of profiles: full and limited. The topics covered in both types of profiles are broadly similar; however, full profiles are written with more detail and include comments from reference insurers. Additionally vendors with full profile policy administration systems are included in the Celent ABCD Vendor View; limited profile vendors are not.

In total, 48 systems from nearly as many vendors were considered, and those vendors were asked to review the inclusion criteria before responding to Celent's request for information (RFI).

The four key criteria were that each system must have:

- At least one new sale to one European insurance customer within the last 24 months.
- At least two European general insurance customers, at least one of which must be an insurer.
- Support for and live implementations of at least two lines of business.
- Participation by at least one reference customer.

These criteria were designed to maximise the number of systems that can be reasonably expected to remain available (and viable) based on vendor size and strength, maturity of each product, its client base, and other important factors.

Some vendors elected not to participate for competitive reasons, and others determined that they could not meet the eligibility criteria after all.

Twenty profiles are included in the “Limited Profiles” section, since they did not fully meet the criteria for a full evaluation but did provide significant information about their offerings.

Evaluation Process

Celent sent a detailed RFI to a broad set of policy administration system vendors. After receiving completed RFIs, each vendor provided a briefing and demo for Celent concentrating on usability and functionality for everyday users, and rules, tools, and connectivity issues for IT or administrative users.

Celent also asked two to three references provided by each vendor to complete a survey and/or an interview to obtain their view of the system’s business and technology value.

Both the RFIs and the reference surveys provided quantitative and qualitative data. Vendors had an opportunity to review their profiles for factual accuracy but did not influence the overall evaluation or the placement in the ABCD vendor view grid. Celent of course has retained final authority over the content of the published profiles. Some of the vendors profiled in this report are Celent clients, and some are not. No preference was given to Celent clients for either inclusion in the report or for the subsequent evaluation.

Not all data gathered from the detailed RFI, vendor briefing and demo, and reference surveys/interviews has been included in each profile. Rather, Celent has attempted to capture key points and values about each vendor at an appropriate level. Unpublished information remains in the Celent knowledge base and is available to Celent’s subscription or consulting clients.

About the Profiles

Each of the profiles presents information about the vendor and solution; professional services and support capabilities; customer base; functionality and lines of business deployed; usability, reporting, and analytics, technology, implementations, and cost; and some summary comments.

Concerning fees, Celent asked vendors to provide first year licence and first year other implementation costs (work by the insurer, vendor, or third parties) for two hypothetical insurance companies:

- National Insurance Company—a single licensed company that writes in the United Kingdom, for eight lines of business, producing annual GWP of €250 million.
- European Insurance Holding Company has four companies, writes in five countries (UK, Spain, France, Italy, and Germany), across 24 personal, commercial, and specialty lines of business, and has GWP of €2.5 billion.

When discussing insurance customers of the various solutions, the profiles use the terms very small, small, medium, large, and very large insurers. Very small insurers (Tier 5) have under €100 million in annual premium; small (Tier 4) have €100 million to €500 million; medium (Tier 3) have €500 million to €1 billion; large (Tier 2) have €1 billion to €5 billion; and very large (Tier 1) have over €5 billion.

The profiles also discuss how many of the advanced policy administration features a given solution provides. These features are:

- Out-of-sequence endorsements
- Automated underwriting (New Business)
- Preconfigured ordering and receiving third party data
- Automated renewals
- Premium and billing accounting
- Statistical reporting

IDIT: IDIT Software Suite

Company and Product Background

Founded in 1998, IDIT I.D.I. Technologies Ltd. is headquartered in Israel and is privately owned with outside investors. The core offering, the IDIT software suite, was most recently re-architected in 2003 to a full SOA compliant solution on the JAVA/JEE platform. The latest release is version 8.1, which was released in November 2010. The annual revenue from the product was €10.5m for 2009.

In March 2011, Sapiens signed a term sheet for a merger with IDIT and FIS Software. At the time of publication of this report, the deal had not been finalised.

IDIT considers the following factors to be differentiators of the product.

- Time-to-market. Parameter-based setup of insurance products and regulatory environment changes.
- Straight through processing throughout the value chain and channel management, with multi-company, multi-branding, multicurrency, and multi-lingual capabilities.
- Reduced total cost of ownership with increased processing efficiencies, accomplished by a single end-to-end solution that manages all modules for all insurance products, globally.
- Advanced SOA technology offering, providing attractive SOA integration capabilities, co-development opportunities and optimised maintenance.

Professional Services

IDIT has grown significantly as a company since Celent's last report adding almost 50% more staff. Of its 165 employees, over 70 provide professional services support for its PAS solution. A large number of them have worked on projects related to the IDIT solution in the last year, and the average number of years of experience of the staff is between 4 and 5 years.

Customer Base

IDIT has a total of twelve clients on the latest version of the software, mostly tier 3 to 5. An additional three insurers are currently implementing the solution. A total of three new European clients have purchased the system since January 2009.

Outside of Europe, four insurers are on the latest version of the software and three are in implementation. IDIT's best known clients include PollsDirect BV, IAK Verzekeringen and Interamerican Bulgaria.

Table 1: Number of European Clients by Country

Country	Live Clients
Belgium	1
Netherlands	4
France	2
Bulgaria	1
Greece	1
Hungary	1
Poland	1
Russia	1
Czech Republic	1
Israel	1

Source: Vendor RFI

Customer Feedback

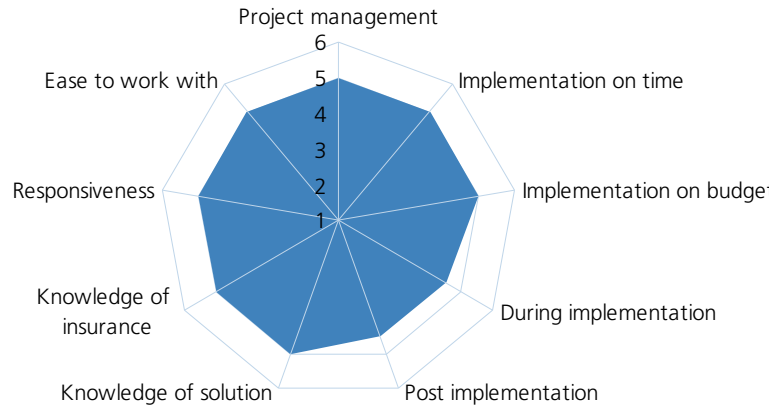
Two customers provided feedback for this report for IDIT. These customers had premiums less than 500 million Euro, and used the solution for more than three years for a mix of commercial and personal lines business. These customers used all the functions in the solution.

Customers had a very positive experience of IDIT's implementation capabilities, as shown in the chart below. They noted among the best things about IDIT included service & support, overall functionality of the solution (especially product, rule and setup builders) and the architecture.

Customers noted that it took a few days to a few weeks to train users on the policy admin system. Cloning an existing product to create a new product with overlapping but significantly different functionality takes less than a month, and creating rules would take less than two weeks. Implementations had used a mixture of web services and XML for integration and customers rated this experience as very good.

Figure 2: Customer Feedback on Implementation Capabilities

Customer average rating of vendor implementation capabilities (1= very poor; 6 = excellent)



Source: Customer feedback

Functionality and Lines of Business

The IDIT solution provides all the end-to-end components in the RFI. Components for billing, reinsurance and claims management can be licensed and installed as stand-alone components. The business intelligence component, IDIT BI is licensed at additional cost.

Table 2: Availability of Additional End-to-End Components

Component	Availability
Rating	Available only bundled with the PAS (no additional cost)
Underwriting	Available only bundled with the PAS (no additional cost)
Billing	Can be licensed/installed as stand-alone component
Commission Management	Available only bundled with the PAS (no additional cost)
Reinsurance Management	Can be licensed/installed as stand-alone component
Business Intelligence / Analytics	Available only bundled with the PAS (with additional cost)
Claims Management	Can be licensed/installed as stand-alone component

Source: Vendor RFI

Table 2: Availability of Additional End-to-End Components

Component	Availability
Content Management	Available only bundled with the PAS (no additional cost)
Other: Workflow Management	Available only bundled with the PAS (no additional cost)
Other: Contact / Client Management	Available only bundled with the PAS (no additional cost)
Other: Forms Library	Available only bundled with the PAS (no additional cost)

Source: Vendor RFI

IDIT reports that the majority of the policy administration functions can be configured by business users, with the exception of integrating third party data.

Table 3: Advanced Policy Administration Functions

Function	Availability
Product Configuration	Configurable by a business user
Product repository	Configurable by a business user
Ability to design product-specific rules	Configurable by a business user
Ability to design product-specific forms	Configurable by a business user
Policy Print and Issue	Configurable by a business user
Out of sequence endorsements (MTAs)	Configurable by a business user
View of what's changed in policy details over time	Configurable by a business user
Automated underwriting	Configurable by a business user
Pre-configured ordering and receiving third party data	Can be changed by technical or IT users
Automated renewals	Configurable by a business user
Premium Accounting	Configurable by a business user
Specification of billing parameters (to be transmitted to separate billing component)	Configurable by a business user
Specification of commission parameters (to be transmitted to separate compensation and billing components)	Configurable by a business user
Statistical reporting	Available through a separate component

Source: Vendor RFI

IDIT also cited the following additional features available in their product:

Table 4:

Feature	Availability	Vendor Description
Earned Premium	Configurable by a business user	Earned premium calculation: IDIT has a process for generating monthly EP calculations in the system as the risk progresses in time, the results are then transferred to accounting.
Geocoding	Configurable by a business user	IDIT™ has integrated with Google maps to retrieve geocoding. The results can be placed on maps for underwriting, mapping to risk zones, locate nearest inspection locations, etc.
Drag and Drop Screen-builder	Configurable by a business user	Graphical screen builder of risk objects: using an intuitive screen builder, business users can create / modify screens for risk objects in products by using drag and drop technology.
Upload from Electronic Forms	Configurable by a business user	Upload of structured data such as policy inspection information from an electronic form template with predefined fields responded to and entered electronically, created by Word templates sent as email attachments and uploaded to the policy. Same is available via preconfigured xls files.
Complaints and Compliments	Configurable by a business user	A configurable complaints and compliments management module to manage compliance and central evolving repository.
Text / SMS messaging	Configurable by a business user	As part of the configurable document management module, IDIT has implemented a growing number of instant Text/SMS to insureds, agents, and inspectors reporting on various aspects of the policy issuance process.

Source: Vendor RFI

The solution also offers task- and business rules management. Forms and correspondence can be created in the insurer standard tool, and called upon where required in the solution processes. All of these functions are available through configuration by a nontechnical business user.

The rules, workflow and content versions are completely auditable, and all IDIT transactions are fully traceable. Tracking of transactions and entries is provided and maintained by user-defined “journals”. All IDIT correspondence (incoming and outgoing) is stored, archived and indexed, and is fully auditable.

The solution has a broad range of personal and commercial products in production today:

Table 5: Lines of Business

Line of Business	Availability	European Insurers Using the System for This LOB
Personal Motor	In production today	12
Homeowners / Renters	In production today	8
Commercial Motor	In production today	5
Commercial Property	In production today	5
Commercial Liability	In production today	4
Workers Compensation	In production today	2
Medical Malpractice	In production today	1
Other Professional Liability	In production today	3
Commercial Packages	In production today	3
Surety	In production today	1
Excess and Surplus	In production today	2
Specialty/Mortgage	In production today	3
Marine/Cargo	In production today	1
Reinsurance for assumed business	In production today	1
Term Life	In production today	1
Agriculture	In production today	1
Travel	In production today	3
Yachts	In production today	2
Expat	In production today	1

Source: Vendor RFI

Usability, Reporting, and Analytics

In the current version of IDIT, access to the underwriter desktop is through a browser, which offers a clean interface with simple controls. The interface switches between a workflow focus with navigation on the left and more complex views on data utilising tabs to offer different perspectives. The layout of the forms are entirely configurable, as demonstrated to Celent with a simple business user focused interface. Configuration of the system is done entirely in a browser through tables and wizards aimed at business users. Where present business rules resemble a basic language or excel like level of complexity. The solution does not come with a graphical workflow manager but it is possible to load workflow definitions into a BPEL editing tool such as Tibco Business Studio.

The solution comes with a variety of standard reports reporting on the broad process areas covered by the solution. For reporting, IDIT offers an optional business intelligence solution call IDIT Business Intelligence BI/MI. This tool also includes standard ETL feeds to third party reporting tools. It comes with standard configurable dashboards and reports.

The data model is proprietary and the most common data model changes are possible using IDIT GUI based setup tools. Other modifications are possible by coding, in the customization layer of IDIT, where customer requirements are implemented. Most recent implementations have not required core changes but in one case, the extended functionality was a flexible reinsurance mechanism which was embedded into the policy and claim processes. This type of core code modification was 3% of the total cost.

The product supports any currency, on a single policy record. Exchange rate tables are be maintained by the customer or updated by an external interface. In terms of multiple languages, any language is supported, and currently English, French, Dutch, Greek, Chinese, Russian, Polish, and Hebrew are in production. Adding further languages does not require any technical support/programming. The solution also supports double byte character set and multilanguage/multicurrency is supported on a single instance.

Technology

The IDIT solution is 100% Java code base. Configuration and development is also done in Java. In terms of operating systems, Windows, Linux (Red Hat, SUSE, Oracle, zLinux) and Unix are preferred with OS/390 and IBM as an additional option. The primary interface of internal business users is 100% Browser-based.

Oracle, DB2/UDB and Microsoft SQL Server are the preferred databases, and Sybase is an additional option, which has not yet been implemented. BEA WebLogic Server and IBM WebSphere are the preferred application servers.

The underwriter and policy service desktops are open to configuration. IDIT offers significant flexibility in how customer portals can be delivered using a combination of configuration, stylesheets and JSP changes to allow flexibility. IDIT observed that the customer portal for new business tends to require technical or IT skills for the required change while the producer / broker portal, policy servicing portal, underwriter and policy service desktop can be configured by business users, as described above.

The integration options are broad and include SOA/web services, XML, MQSeries, flat files, SQL Calls and JMS. Further to these, integration is possible with ESB (multiple vendors), security systems (LDAP directories, Tivoli access manager, identity manager and others) and the business process manager. IDIT reports that about 20% of internal communication between components is done using the products web services. External systems can make calls to the web services using SOAP or plain XML messages over HTTP and MQ. The software suite can make calls to other systems using SOAP or XML over HTTP and MQ. The XML based services are REST Style services and of course HTTPS is supported.

IDIT is scalable and this is done by adding application server instances and DB resources. High availability is gained by clustering the middle-ware. This is demonstrated at the largest deployment, where 1000 users run 1.5 million policies.

Implementation and Costs

A typical project takes four to six months from initiation until the first line of insurance is live, with subsequent lines taking one to three months. The size of the team depends on the scope of the project and client, and varies between 3 and 15 people. A typical breakdown of staffing would be one dedicated manager, 45% business analysts, 15% architects, 30% technical staff and 10% trainers. Third parties such as global system integrators or local system integrators (e.g., BSB in Benelux) are used in areas which are not related directly to the core solution. This may include, among others, interfaces, migration, LOB replication, training, testing and all the way up to prime-contracting.

The bulk of the first year costs typically goes towards the initial installation and customization (60%), with 30% going towards the software licence and the remainder split equally between the annual maintenance and training.

For the most part, the licence model is a one-time fee, which can be based on multiple parameters including the number of functional components/modules, the number of lines of business, the number of concurrent users, the number of total users and the policy or premium volume. However, the company notes that this fee depends on a case-by-case basis, depending on the client and the contract.

The typical costs for a national insurer as outlined in the RFI would be up to €1 million for the initial license fee (including initial maintenance fee) and total implementation costs exclusive of license fee of €1 million to €3 million. This would utilise 3 to 5 FTE from the insurer. For a

European insurer as outlined in the RFI the typical costs would be up to €3 million for the initial license fee (including initial maintenance fee) and total implementation costs exclusive of license fee of €6m to €10m. This would utilise 3 to 5 FTE per country from the insurer and require an central leader or team. In both cases the continuing support / license fee would be of the order of 20% of the initial license fee.

Summary

With its heritage in European countries IDIT Software Suite offers a highly configurable system that is conscious of the complexities of supporting multiple languages and currencies. The company continues to invest in improvements and updates to the system, leveraging industry standards and third party tools where appropriate. Carefully selected implementation partners will give the company additional bandwidth as it continues to grow. Celent believes that IDIT is an excellent option for all insurers wanting to adopt proven modern technologies.

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