

**Proposed Data Standards for Table Data
in the
Insurance and Pension Industries**

*A paper describing a standard table format for use in
information systems that use or produce table data and the
advantages of adopting the standard.*

Version 1.0

The Computer Science Section of the Society of Actuaries
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Table of Contents

| | |
|--|---------|
| Overview | Page 3 |
| Background | Page 4 |
| Why use TableManager and the SOA ASCII Table Format? | Page 4 |
| Who Should use the SOA ASCII Table Format and TableManager | Page 5 |
| How To use the SOA ASCII Table Format and TableManager | Page 5 |
| Current Known Limitations | Page 6 |
| Future of the Standard | Page 6 |
| Company and Vendor Support | Page 7 |
| Glossary | Page 8 |
| Further Information | Page 9 |
| Appendix A -Description of the SOA ASCII Table Standard | Page 10 |
| Appendix B - List of Other Insurance Industry Data Standards Initiatives | Page 12 |
| Appendix C - Survey on Implementation Intentions and Future Development Procedures | Page 15 |

Overview

Data standards are developed for the purpose of significantly improving workflow by facilitating the transfer of data between different systems from different vendors. This gives companies the flexibility to choose "best of breed" software packages for different purposes and still have them communicate to one another. Such standards allow developers to build software applications to a common data model, thereby allowing users to focus more time on actually using the functionality of the system, the results produced, and less time on manipulation of data formats in moving data from one system to another (or, as is sometimes the case, in re-keying the data).

Data standards are becoming prevalent throughout many industries, including financial services and the insurance industry in particular. (See Appendix B for a list of Data Standards efforts within or affecting the insurance industry.) The actuarial community stands to benefit greatly from participation in the development of these standards, and ultimately in the implementation of such standards.

To date, the actuarial profession has not played an active role in any of the major standards development initiatives. Much attention has been focused on systems used by the agency force, including data used by illustration systems and data stored in administration systems. These initiatives are then defining data standards for all kinds of policyholder data and product feature information. This is the same data used by actuaries and other financial professionals in the back office for the purposes of valuation, financial reporting, projections, experience studies, product development and so forth. It therefore seems logical that the insurance and pension industry data standards already being developed are ultimately extended to back office systems such as valuation, administration and projection systems. It also makes sense that if the data standards efforts affect data and systems used by actuaries then actuaries should be playing a more active role in the development of these standards.

The major data standards initiatives do not appear to yet encompass standards for table type data, that is, anything that comes in the form of an "ultimate" or "select and ultimate" table such as mortality tables, lapse rates, premium rate tables, and cost of insurance charges. Being the primary users and creators of such data this is certainly an area where the actuarial profession can play a leading role.

With these goals in mind the Computer Science Section (CSS) of the Society of Actuaries (SOA) is putting forth an initiative to encourage the standardization of table data in the form of aggregate or select and ultimate tables. This includes tables for mortality, morbidity, mortality projection rates, lapse rates, premium rates, cost of insurance charges, surrender charges and other types of termination rates and age and/or duration dependant product feature data. This effort is a work in progress and the CSS is continually seeking feedback to ensure this effort fulfills the goals of users. The CSS is also looking for suggestions on how to manage the evolution and development of the standard.

This effort extends a prior project of the CSS to construct an Actuarial Tables Database called "TableManager" (described in detail below). It is the goal of the CSS to encourage software developers, insurance companies, pension consulting firms and other insurance and pension data standards initiatives to use the standard ASCII table format of the TableManager application. By using the standard format, age and duration dependant tables may be easily interchanged between different systems. This should result in significant workflow improvements in all back office departments as table data accounts for a large proportion of the data transferred across or shared between two different systems. Users may also benefit from an existing base of over 630 available tables including standard annuitant, population, insurance and regulatory table data from more than 15 countries. Additionally there is a binary database format that may be of interest to some developers but the thrust of this paper is to support the use of the ASCII table format.

This paper discusses the background of the initiative to support the adoption of the ASCII table format of TableManager, the reasons to adopt this standard and how to integrate it into insurance and pension systems. Also included with this Paper is a survey requesting your input on your implementation plans and suggestions for future development of this standard.

It must be noted that the promotion of data standards is in no way intended to enforce a standard but rather to encourage efficient use of actuarial tables.

Background

Based on a proposal tabled in 1994 by Steve Strommen, the Computer Science Section (CSS) supported a project to build an Actuarial Tables Database. The proposal was to construct a database containing actuarial tables, an executable program to manage the database and a collection of computer source code to access and interface with the database, in various computer languages. The first version of this software, called TableManager, was made available in the summer of 1995 on Actuaries Online.

As of September 1998, over 630 "standard" tables from around the world have been converted to the SOA table format and are available from the TableManager application. This application allows users to view, edit, add and modify these tables, primarily mortality tables but also morbidity and mortality projection tables. Individuals may also export tables to ASCII file format or to Lotus spreadsheet format. All tables used by TableManager adhere to the same standard format.

Additionally, source code in C++ and an APL workspace are available to help developers integrate the database, ASCII tables and table formats into their own applications. The source code is available for free as part of the TableManager application.

The current goal of the CSS is to make SOA members, software developers and others in the industry aware of the existence of the Actuarial Tables Database, the associated table formats, the TableManager application and application programming interface (API) source code. The CSS also wishes to encourage software developers, insurance companies and pension consulting firms to incorporate the standard ASCII format into software systems that use or create age or duration dependant tables.

Why use TableManager and the SOA ASCII Table Format?

TableManager and the SOA ASCII Table Format are a unique non-proprietary development effort resulting from input by a large number of actuaries. The standard table formats are a result of extensive thought and discussion among actuaries with a broad background in computer issues. The result is an open standard with no hidden agenda and is fully supported by the SOA Computer Science Section.

The case for standard table formats is discussed at length in the overview section. In summary, it allows developers and users to quickly and efficiently interchange tables into any SOA Table Format Compliant system. This will improve efficiency, reduce errors and provide users with greater flexibility in their jobs.

TableManager also provides one location for over 630 "standard" actuarial tables. It is the most comprehensive source of freely available tables. The standard format is also a template for how companies may create electronic versions of their own proprietary actuarial tables. Any SOA Table Format Compliant system would then be able to easily incorporate these tables.

Additionally, integration and use of the tables into current systems is facilitated by free source code in C++ and APL. This source code shows developers how to manipulate the databases and tables and will allow them to quickly integrate this format into other computer systems.

Finally, open standards are a must for our industry and related professions to extract maximum value from the tools we rely on the most: our computer systems.

Who Should use the SOA ASCII Table Format and TableManager ?

Individuals, insurance companies, pension consulting firms and software developers should use the SOA ASCII Table Format and TableManager. The TableManager application will provide a source of over 630 actuarial tables; in itself the TableManager is a comprehensive resource. At a minimum, users can extract any table to suit their own purpose or to use in other applications. TableManager may also be used to maintain and edit, add or modify actuarial tables.

Additionally, software developers should consider using the SOA ASCII Table Format as the standard format for all age or duration dependant tables. If developers use this format and write the layer of code to manipulate these ASCII tables (or use source code from the provided APIs) then it is trivial for users to interchange actuarial tables. This will be of large benefit to the industry in general and the actuarial profession in particular.

How to use the SOA ASCII Table Format and TableManager

First, interested parties should download the TableManager application and become familiar with the application and supporting documentation. Information on downloading the TableManager application is available in the Further Information section.

Once comfortable with the application itself, the ASCII Table Format should be understood (see Appendix A for the definition and example) and, finally, for interested developers the source code should be studied as an example of how to develop classes or workspaces to manipulate the tables.

Software developers who create systems employing the SOA ASCII Table Format for all actuarial tables will be referred to as SOA Table Format Compliant (see the glossary for full definition). It is the primary goal of the CSS to encourage compliance - at least at this level.

Software developers who create systems employing the database format of the TableManager application for all actuarial tables will be referred to as SOA Database Format Compliant (see the glossary for full definition). The CSS would also like to encourage compliance at this level. However, the CSS considers the former level of compliance to have higher priority. Ideally the CSS would like to see vendors develop applications with this further level of compliance and to make use of the provided APIs.

The CSS will produce a list of vendors (and their relevant systems) who claim to be compliant with the standard and the level of compliance - SOA Table Format Compliant and/or SOA Database Format Compliant. This list will be distributed widely amongst the insurance and pension industries and also placed on the CSS pages of the SOA Web site. Initially, the CSS will also compile a list of those vendors who intend to be standards compliant in the near future, based on the answers to the questions in the survey attached to this paper. This list will also be posted to the SOA Web site.

Initially, then standards compliance will be based entirely on the "honor system" - vendors who claim to be compliant will be included on the list of compliant companies. The CSS Council will then set up a system to receive user comments on the use of such systems as they relate to the standards and post these to the SOA Web site. This could possibly be done through a Web based bulletin board where users can post their own comments, and vendors their responses. Suggestions for procedures for alternative, independent or more comprehensive verification of standards compliance should be included with your survey response.

Current Known Limitations

As with any standard format there are limitations and the following have been identified with the SOA Table Formats and the TableManager application:

1. Does not support parametrically defined tables. Parametrically tables are tables that are defined by formula as opposed to static data.
2. Integer ages. The TableManager application currently only supports integer ages separated by one year. The TableManager application does not support interpolation of ages and, as a result, for example, quinquennial ages are not supported. However, the table format itself can be used and custom applications can be written based on the standard format to handle any required interpolation.
3. Proprietary tables are not covered. The databases do not contain proprietary tables nor are they expected to. However, proprietary tables are encouraged to be available in the standard format as it will make integration in SOA Table Format Compliant applications simple.
4. TableManager only runs on Windows. While TableManager only runs on Windows, the ASCII format of the tables will integrate with computer systems running in any language and on any operation system including UNIX and Mac. Additionally, if an individual or group of developers wish to create a version of TableManager for non-Windows operating systems, the final version can be presented and reviewed by the CSS for approval and release.
5. The tables included in TableManager have not been formally approved or checked by any group or organization. Rather they have been submitted on a voluntary basis by interested SOA members. If you feel strongly that these tables should go through a formal review process and be "blessed" by credible organizations (such as actuarial organizations of the countries to which tables apply) you should indicate this on your survey response and possibly also make suggestions for procedures, responsibilities and funding of such activity.

Future of the Standard

The CSS will be actively lobbying software developers, insurance companies and pension consulting firms to incorporate the SOA ASCII Table Format for all relevant application development. Insurance industry standards bodies will also be contacted to engage the SOA Table Format as the standard for age and duration dependant tables.

The CSS will also evaluate all suggestions and will determine if there is reason to further develop and enhance TableManager and to provide additional interfaces to TableManager data, such as a COM interface. The CSS is interested in receiving input from vendors, companies and standards organizations on how the standards should be developed in the future. Suggestions you might have for future development and the process for requesting and approving changes to the standard should be detailed in the attached survey.

The CSS and SOA will also be inviting other actuarial groups to participate and comment on this standard including the CAS, AAA, ASPA, CIA and CCA. Other international actuarial bodies will also be exposed to this standard and will be requested to provide comment and feedback.

The current version of the table formats will be referred to as Version 1.0. However, this is a work in progress and based on user feedback the format may be improved and enhanced over time.

Company and Vendor Support

The following companies have already expressed interest, have plans to develop applications or have already developed applications that are SOA Table Format Compliant:

Add disclaimer here.

| Company | URL | Status |
|---------------------------|--|--|
| Canada Life | www.canadalife.com | Single project is compliant. |
| Hutchison Avenue Software | www.hasc.com | Actuarial Kit and applications currently compliant (Java and C). |
| Northwestern Mutual Life | www.northwesternmutual.com | Single project is compliant. |
| TAS | www.towers.com/tas/ | Plan on integrating in 1999 |

In addition the standard format, TableManager and this Paper are being sent to ACORD for consideration as a table data standard to be incorporated into the OLifE standard at some future date.

For the most up to date listing of support please visit the SOA web page under the Computer Science Section.

DISCLAIMER: The Society of Actuaries makes no warranties as to the services of the companies and vendors listed above. The listing of them does not constitute knowledge, endorsement or approval by the Society of Actuaries of them, nor does the Society of Actuaries accept any liability for the services or work of the companies and vendors. Individuals using these companies and vendors do so at their own risk, and the companies and vendors shall remain individually responsible for any actions, statements or services provided to anyone who retains them. Because the Society of Actuaries is committed to adhering strictly to United States antitrust, copyright, trademark, securities and other federal statutes, as well as state common laws covering libel, slander, defamation, false advertising, invasions of privacy and violations of the rights of publicity, the Society of Actuaries strongly discourages users of the services of the companies and vendors from hiring them for anything that: (1) sets or controls prices or terms of products or services and the manners in which products or services are sold; (2) violates the proprietary or personal rights of others; or (3) constitutes a misleading advertisement. YOUR USE OF THE SOCIETY OF ACTUARIES' DATA STANDARDS IS ACKNOWLEDGMENT OF YOUR AGREEMENT WITH THE ABOVE.

Glossary

SOA Table Format Compliant - Indicates that a software application uses the ASCII table format as specified by the SOA TableManager program. The program will then be able to interchange any table and continue to correctly operate. All table types (example: aggregate and select and ultimate) must be supported to be compliant.

SOA Database Format Compliant - Indicates that a software application uses the SOA TableManager database format in addition to the table format. The application must be capable of interchanging any database in the SOA format and still function correctly. Although this is a higher level of compliance than being SOA Table Format Compliant, it is not the current goal of the Computer Science Section.

Further Information

Where to get the Table Manager program:

1. The SOA Web site (www.soa.org) under the Software and Technology Library section. The current link to download the TableManager Version 1.1 is www.soa.org/library/tblmgr11.zip.
2. The Canadian Institute of Actuaries Web site (www.actuaries.ca) with a current direct link at www.actuaries.ca/Database/indexeng.htm.

This paper may be found on the SOA Web site (www.soa.org) under the Computer Science Special Interest Section.

Additional References to the SOA Tables Database Project:

1. "Some Thoughts on an Actuarial Tables Database", Stephen J. Strommen, CompAct, September 1994
2. "Council Approves OnLine Mortality Tables Database", Stephen J. Strommen, CompAct, February 1995
3. "An Update on the Mortality Tables Database", Stephen J. Strommen, CompAct, October 1995
4. "Mortality Table Database Update", Stephen J. Strommen, CompAct, January 1996

Who to contact:

Any member of the Society of Actuaries Computer Science Section Council will be able to forward any questions or inquiries to the correct person. You can e-mail the Section Council at cssc@ajug.org.

A current list of the Computer Science Section councilors is available on the SOA Web site.

Also feel free to contact Stephen J. Strommen (stevestrommen@northwesternmutual.com) or Scott Parkinson (scott@hasc.com) with questions.

Appendix A - Description of the SOA ASCII Table Standard

Required for all tables

| | |
|--------------------------|--|
| Table name | Any character string up to 49 characters (+) |
| Table number | An integer used for table lookup, unique to each table |
| Table type | Select or Ultimate |
| Contributor | Name of the person who contributed the table |
| Minimum age | Lowest tabulated age |
| Maximum age | Highest tabulated age |
| Select period (*) | Number of years in the select period |
| Maximum select age (*) | Highest age for which select values are supplied |
| Number of decimal places | Number of digits to which values are rounded |
| Table values | The numeric values |

(+) Table names can exceed 49 characters, but any characters beyond 49 are truncated in lists of table names.

(*) The Select period and Maximum select age are only required for select tables.

Optional additional information

| | |
|---------------------|---|
| Source of data | Where was the underlying experience data obtained? |
| Volume of data | What was the volume of underlying experience data? |
| Observation period | What time period was observed? |
| Unit of observation | e.g. number of lives, amount of insurance |
| Construction method | How was the table constructed from the experience data? |
| Published reference | Is the table published somewhere? |
| Comments | Any miscellaneous comments about the table. |

Example Table:

Here is a simple example of a select and ultimate table laid out as ASCII text. An explanation follows.

Table name: Some table

Table number: 12345

Table type: Select

Contributor: Somebody

Comments: This is a sample table.

The values don't really mean anything.

Minimum age: 0

Maximum age: 10

Select period: 3

Maximum select age: 5

Number of decimal places: 5

Table values:

| | 1 | 2 | 3 | 4 | |
|----|---------|---------|---------|---------|----|
| 0 | 0.00010 | 0.00012 | 0.00015 | 0.00020 | 3 |
| 1 | 0.00011 | 0.00014 | 0.00018 | 0.00028 | 4 |
| 2 | 0.00012 | 0.00015 | 0.00025 | 0.00037 | 5 |
| 3 | 0.00014 | 0.00024 | 0.00036 | 0.00047 | 6 |
| 4 | 0.00023 | 0.00035 | 0.00046 | 0.00058 | 7 |
| 5 | 0.00030 | 0.00045 | 0.00056 | 0.00070 | 8 |
| 9 | | | 0.00080 | | 9 |
| 10 | | | 0.00090 | | 10 |

There are two main parts to the layout of the table; the description section and the table values section.

In the description section, each kind of descriptive data is preceded by a specific phrase beginning on the left hand margin and terminated by a colon. The specific phrases that are used must be spelled exactly as shown in the list under the file formats topic. Note that the documentation on any topic containing descriptive text can extend across more than one line, as is shown above for the Comments topic.

The table values section begins with the line "Table values:". For select tables (but not for aggregate tables), this is followed by a line containing duration numbers as column headings. Subsequent lines contain an age followed by one or more table values.

Note that all data is space delimited (as opposed to Tab delimited).

Further examples can be produced using the TableManager program to further understand the ASCII standard format.

Appendix B - List of Other Insurance Industry Data Standards Initiatives

A. OLifE

A.1 Description of Standard

OLifE is an industry supported standard designed to integrate data between different software applications used in the insurance and financial services industries. The underlying technology of OLifE is OLE and the specifications are written assuming applications will be developed in a 32 bit Windows environment. The objects supported in OLifE define properties and methods needed to retrieve data. Such data objects include ;

- Party object. e.g.: policyholder, producer or carrier
- Holding object. e.g.: Policy - life, annuity and health - including product features, charges, investment options
- Investment product object
- Activity and group (e.g. : household) objects

The OLifE standard is currently focused on systems for contact management, illustrations, financial planning, electronic application and administration system data. Beyond the desktop the plan is to extend the OLifE standard to be applicable to distributed computing, legacy system support, service center support, Internet development and to apply to the insurance industry world wide.

A.2 Sponsoring Organization

ACORD (Agency-Company Organization for Research and Development) is a non-profit association dedicated to the development of insurance industry standards. Standards development is managed by ACORD through program management, technical support, change process, voting process and supporting services.

A.3 Participating Vendors

•Beacon Software Development Company •Benefit Technology •Borealis Corp. •Business Operations & Software Solutions Pty. Ltd. (Australia) •Cologne Reinsurance Company of Australia Ltd (COMPASS) •Coss Development Corporation •CSC •Cybertek •E-Z Data •ECTA •Emerging Information Systems (Canada) •FastForms •FDP Corp. •Financial Profiles •Finansys Inc. •FIPSCO •FM Systems (Ireland) •Genelco •Genesis Development Corporation •IBM (Canada) •Impact Technologies •Insurance Systems Laboratories (Japan) •Insurance Technologies •Intuitive Systems Limited (England) •Investment Data Technologies Pty. Ltd. (Australia) •Kettley Publishing •KinetiSoft, Inc. •Life Research Pty. Ltd. (Australia) •LifeLink Corp. •Lifeweb L.L.C. •Microsoft •ONTOS Inc. •Pacific Financial Systems (Australia) •Philibert Software Group •Plantech Consulting Group (Australia) •Protax Financial Services Pty. Ltd. (Australia) •Rolling Thunder Computing, Inc. •Sealcorp Holdings Ltd. (Australia) •Select Tech Inc. •Softbridge, Inc. •Solcorp (Canada) •Spidertek •Sterling Wentworth •Sun Microsystems •Swiss Re Life & Health Australia Ltd. (Magnum) •Sybase •Sybiz West Pty Ltd (Australia) •System Innovations •The National Underwriter Company •Tillinghast-Towers Perrin •United Systems

A.4 Participating Insurance Companies

•AEGON USA •Co-Operators •Lincoln National Life •Manulife Financial (Canada) •MetLife •Mutual of New York •Mutual of Omaha •National Mutual Financial Services (Australia) •NY Life •Pacific Life •Phoenix Home Life Mutual Insurance Company •Principal Financial Group •Provident Mutual Life Insurance Company •Prudential •State Farm Insurance •SunLife Assurance Co. of Canada •The Co-Operators Insurance (Canada) •The Equitable •Tower Life Australia

A.5 Contact Information

Contact : Tana Sabatino, OLifE Group Manager
Phone : 800-444-3341 x440 (from USA)
 914-620-1700 x440 (from outside USA)
Fax : 914-620-3640
E-mail : tsabatino@acord.org , Web site: www.acord.com

B. OMG Financial Domain Task Force (FDTF)

B.1 Description of Standard

FDTF is an interface standard for the financial services industry focusing on seven generic management facilities;

- Product
- Agreement
- Party
- Financial transaction
- Portfolio
- Investment pool
- Asset and liability instance

B.2 Sponsoring Organization

OMG (Object Management Group) is the world's largest software consortium whose objective is to standardize interfaces and not functionality. They use a consensus based approach and develop standards to be open, realistic, vendor-neutral and international.

B.3 Membership

OMG's membership consists of several hundred companies from the software industry and many other industries, including financial services. For a complete listing of members by type see OMG's Web site at www.omg.org.

B.4 Contact Information

You can find the appropriate contacts at the following address;

<http://www.omg.org/omg/contacts/directory.html>

C. Insurance Application Architecture

C.1 Description of Standard

Proprietary standard developed by IBM focused on developing a high level business model for all lines of insurance including models for;

- Client information integration solution
- Insurance data warehouse
- InsureAgent

C.2 Sponsoring Organization

IBM

C.3 Participating Vendors

IBM

C.4 Contact Information

More information can be found at the following address;

<http://www.insurance.ibm.com/insur/iaa/iaa.html> Or e-mail : ask_iaa@vnet.ibm.com

Appendix C - Survey on Implementation Intentions and Future Development Procedures

1. General

Name : _____

Company : _____

Position : _____

Contact Details : _____

Address: _____

Phone: _____

Fax: _____

Email: _____

Company Type : Vendor
 Insurance Company
 Pension Consulting Firm
 Standards Organization
 Other

2. Willingness and Plans for Standards Implementation

(Questions for Vendor or Company Developing Internal Applications)

- a) Will you be likely to adopt this Standard ?

- b) At what level : Table Format Compliant
 Database Format Compliant
 Both

- c) If Yes to a) ...
 - i. What system or systems you develop will become standards compliant ?

 - ii. When do you think these systems will first become standards compliant ?

- d) If No to a) ...
 - i. Why ?

- ii. What would make you change your mind and adopt a table standard ?

3. Changes to Standards and Standards Development Procedures

(Questions for all Respondents)

This is version 1.00 of the table data standard. As with other standards this standard will progress over time.

- a) Do you have any suggestions for later versions of the standard ?
Eg: disability termination rates, monthly values, any other table features not included herein.
Please List
- b) How do you think suggestions for changes should be incorporated into the standards? (Yes or No)
 - i. Submission to CSS Council for approval ?
 - ii. Voting by SOA CSS Members ?
 - iii. Voting by SOA Members ?
 - iv. Voting by all interested parties in insurance industry ?
 - v. Voting by special sub-committee appointed by SOA CSS Council?
 - vi. Voting by special sub-committee nominated/elected by interested parties in insurance industry?
 - vii. Outsource process to existing/established standards organization such as ACORD?
 - viii. Other ? Please describe.
- c) How should people make requests for changes ?
 - i. E-mail / mail to SOA CSS Council ?
 - ii. Bulletin Board on SOA Web site ?
 - iii. Other ? Please Specify
- d) How do you think suggested changes should be communicated to all interested parties ?
 - i. SOA Web site ?
 - ii. Mailings - Paper or E-mail ?
 - iii. Other ?
- e) Do you see a need for a Data Standards Bulletin Board and/or Discussion Group on the SOA Web site?
- f) What topics should be covered in such Bulletin Boards or Discussion Groups?

4. Standards Verification Procedures

(Questions for all Respondents)

- a) Do you agree with the the overall approach of identifying systems and companies as being "compliant" with the standard, and being able to publicize this fact?

- b) If you said "no" to 4.a) above, why is that? Please explain.

- c) Are you happy with the "honor system" of standards compliance?

- d) Do you see a need for independent verification via a more formalized process?

- e) If so, do you have suggestions for how such a process might operate and how it might be funded?

- f) Do you think the standard tables in the tables database need to undergo a formal review process and be "approved" by a credible organization(s)?

- g) If yes to f)...
 - i. Who should have responsibility for approving the tables?

 - ii. What should be included in the review process?

 - iii. How should such a review process be funded?

5. Other Standards Initiatives

(Questions for all Respondents)

- a) Is your company a member of, or somehow involved or participating, in any other standards initiative?

- b) If yes, what standards initiatives are you involved in?

- c) What systems are, or, will be, compliant with these standard(s)?

- d) Are you aware of any other table standards initiatives in the financial services industry?

- e) If yes, what is the sponsoring organization and the relevant standard?

- f) Would you like to see the table standard as described in this Paper incorporated into other insurance industry data standards efforts?

- g) If so, which ones ?

6. TableManager Platforms

While the proposed standard table data ASCII format will integrate with with computer systems running in any language and on any operating system, as noted in the Paper "TableManager" runs only in Windows. Do you think TableManager should be developed to run on other platforms, and if so, which ones?

7. General Comments
(Questions for all Respondents)

Please list in this section any other comments or suggestions you have in relation to the proposed data standards.