Data Interface Standard for Accounting Software

Project Progress Report

China National Audit Office

February, 2014
1. Project background
2. Project roadmap
3. Work already done
4. Work in progress
1. Project background

- Project name: Data Interface Standard for Accounting Software
- Project output: Guideline on Data Interface Standard for Enterprise Accounting Software
- Project starting and ending time: 2013.04～2016.04
- Team leader: China
- Team members: India, Indonesia, Kiribati, Malaysia, Poland, South Africa and United States.
1. Project background

2. Project roadmap

3. Work already done

4. Work in progress
2.1 Project roadmap

- Project initiation
- Project preparation
- Working draft
- Team negotiation
- Enquiry
- Approval
## 2.2 Project roadmap

<table>
<thead>
<tr>
<th>Time node</th>
<th>Phase</th>
<th>Milestones or submissions</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013.04 ~ 2013.07</td>
<td>Project initiation</td>
<td>▪ Establish the project group ▪ Work out the project plan</td>
<td>Completed</td>
</tr>
<tr>
<td>2013.08 ~ 2013.12</td>
<td>Project preparation</td>
<td>▪ Distribute and withdraw questionnaires feedback ▪ Draw up research report</td>
<td>Completed</td>
</tr>
<tr>
<td>2014.01 ~ 2014.12</td>
<td>Working draft</td>
<td>▪ Standard working draft</td>
<td>In progress</td>
</tr>
<tr>
<td>2015.01 ~ 2015.06</td>
<td>Team negotiation</td>
<td>▪ Project team draft</td>
<td>Not Started</td>
</tr>
<tr>
<td>2015.07 ~ 2015.12</td>
<td>Equiary</td>
<td>▪ Equiary draft</td>
<td>Not Started</td>
</tr>
<tr>
<td>2016.01 ~ 2016.04</td>
<td>Approval</td>
<td>▪ Final draft</td>
<td>Not Started</td>
</tr>
</tbody>
</table>
1. Project background
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3.1 Establish the project group

Project office of Data Interface Standard for Accounting Software

China
- Yunyi Yang
- Li Yang
- Zhonghe Sun
- Tao Peng
- Hong Zhang
- Jing Lu

India
- RAM MOHAN JOHRI
- ANADI MISRA
- JAGBANS SINGH
- SAURABH NARAIN

Indonesia
- BAHRULLAH AKBAR
- ROCHMADI SAPTOGIRI
- NOVIS PRAMANTYA BUDI
- KANTI SULISTYOWATI

Kiribati
- LUCAS TATIRETA

Malaysia
- UNGKU MOHAMMAD ALHADY

Poland
- GABRIELA BESZLEJ
- PAWEL BANAS

South Africa
- JABULILE NKOSI
- NKUTHALO MOYO

the United States
- MADHAV PANWAR
3.2 Work out the project plan

(1) Project initiation

- Establish project team for standard development.
- Confirm persons to contact of each country and contact information of all participants.
- Make and send the project plan to Chair India and all the team members in June, 2013.
3.2 Work out the project plan

(2) Project preparation

- Design questionnaire.
- Distribute and withdraw questionnaire within WGITA members.
- Develop research report according to the survey results.
- Finish by the end of 2013.
3.2 Work out the project plan

(3) Working draft phase

- According to the result of the project preparation, extract the basic, effective, common, and comprehensive data elements to form a standard working draft.

- Finish by the end of 2014.
3.2 Work out the project plan

(4) Project team negotiation

- Seek comments within the project team members, polish the standard working draft, and draw up a team draft.

- Finish in June 2015.
3.2 Work out the project plan

(5) Enquiry phase

- Seek comments within WGITA members.
- Accomplish enquiry draft (draft international standard).
- Finish in the end of 2015.
3.2 Work out the project plan

(6) Approval phase

- Accomplish final draft international standard by 2016.
- Submit to WGITA for approval.
3.3 Distribute and withdraw questionnaires

In October 2013, SAI China designed the questionnaire and Chair India distributed it to WGITA members.

(1) accounting standards complied by enterprises.
(2) accounting software applied by enterprises.
(3) audit software used by SAI.
### 3.3 Distribute and withdraw questionnaires

By December 5, 2013, the following 11 SAIs returned their feedback:

<table>
<thead>
<tr>
<th>Australia</th>
<th>Bangladesh</th>
<th>Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>India</td>
<td>Japan</td>
</tr>
<tr>
<td>Lithuania</td>
<td>Norway</td>
<td>Peru</td>
</tr>
<tr>
<td>Poland</td>
<td>Slovenia</td>
<td></td>
</tr>
</tbody>
</table>
3.4 Research report--Accounting standards

- Australia and Poland are using accounting standards based on International Financial Reporting Standards.

- Other countries are using their own national accounting standards.
3.4 Research report--Accounting software

- The result of accounting software usage in various countries is complex and decentralized.
- Hardly any two or more countries are using the same accounting software.
- Most accounting software database systems are based on Oracle or MS SQL.
Most SAIs are using one or several general audit software among ACL, IDEA, AS/2 etc. Some SAIs also develop their own special audit software.
3.4 Research report

- With the development of audit work, auditing under IT environment is not limited by financial reports.

- Furthermore, electronic accounting vouchers and books are increasingly concerned by auditors.

- And these raw transaction data is generally reflected in the underlying accounting software database.

- SAI s use several general audit software or the software developed by themselves.

- However, there are various accounting software and ERPs in front of SAI s. For these accounting software, even different versions of the same accounting software, the database design and data structure are different.
3.4 Research report

- Usually auditors cannot directly get the underlying data in the accounting software from the auditee.

- Even if they can get the underlying data through some technical measures such as database backup, they still cannot obtain meaningful information in depth because of the unknown data structure.
3.4 Research report

If there were no data interface standard, audit software should develop different interface modules against every accounting software.

If we make a data interface standard for the accounting software, and all the accounting software could follow this standard and develop the data interface module in accordance with standard data, audit software could use these data directly.
3.4 Research report

- Assume that one country has $L$ kinds of audit software, $M$ kinds of accounting software, and every accounting software has $N$ versions.

- In the case of no data interface standard, every audit software must develop $M \times N$ interface modules. Therefore, for $L$ kinds of audit software, the number of the interface modules equals $L \times M \times N$.

- According to the investigation results, $L \times M \times N$ would be a huge number because of the variety of accounting software in each county.

- If we have a data interface standard for the accounting software, all the accounting software comply with this standard and make the data interface module in accordance with standard, $L$ kinds of audit software would only require $L$ interface modules.
According to our questionnaire results, 10 SAIs are using 11 kinds of audit software. And there are 22 accounting software.

Even if we do not consider version upgrade of software, audit software still needs to develop $11 \times 22 = 232$ interface module under the situation of no data interface standard.

If we have the interface standard, audit software only needs to develop 11 interface modules.
1. Project background

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Plan of working draft phase

- Extract data elements
- Confirm data table
- Draw up a standard working draft
4. Work in progress

Rules for description of data elements

a) Symbol of data elements: it is a unique serial number marked with 3 numbers.

b) Name of data elements: the English name of data elements.

c) Explanation of data elements: the meaning description of data elements.

d) Representation of data elements: representation for data elements' value of type and length, detail representations are as follows:

- C represents alphabets, Chinese characters, numbers and other characters.
- C \( n \) represents the fixed length of characters is \( n \).
- C..\( n \) represents the maximum length of variable characters is \( n \).
- I..\( n \) represents the maximum length of the integer is \( n \).
- Dw.d represents calculated form of decimal fraction; \( w \) represents the maximum length which includes characters before and after the decimal point; \( d \) represents the maximum length after the decimal point.

e) Note of elements: other explanations refer to the data elements.
Examples of data elements' description:

- Symbol: 002
  Name: beginning balance
  Explanation: beginning balance of bookkeeping base currency of accounts
  Representation: D20.2
  Note:

- Symbol: 003
  Name: voucher date
  Explanation: date of making accounting vouchers
  Representation: C8
  Note: represented as “CCYYMMDD”
Thanks