



# **E-Learning Standard Promotion in Japan**

**- Conformance Program and Platform development -**

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Advanced Learning Infrastructure Consortium/  
e-Learning Consortium Japan/  
NTT-X

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# Conformance Program in Japan



ALIC

Advanced Learning Infrastructure Consortium / 先進学習基盤協議会



ALIC (Advanced Learning Infrastructure Consortium) Interoperability Committee



eLC (e-Learning Consortium Japan) Conformance Committee

- ◆ Certification of **14 platforms** last year (April 2002~March 2003)
- ◆ This year's (April 2003 ~March 2004) main activities will revolve around **contents certification**

# Platform Certification

- Certification of 14 platforms last year (April 2002~March 2003)
  - One from US and one from Korea are included
- ADL Test Suite Multilingual Certifying Tool is planned to be adopted for the next (3rd) certifying test

	Date of Practice	Number of Application	Number of Certification	Test Tool
The 1 <sup>st</sup> Certification	Dec. 3rd, 2002	10	9	· Tool developed by eLC
The 2 <sup>nd</sup> Certification	Mar. 25th, 2003	4	5	· Tool developed by eLC · ADL Test Suite 1.2.3
The 3 <sup>rd</sup> Certification	Feb 24th, 2004	2		· Tool developed by eLC · ADL Test Suite 1.2.5 Multilingualized version
Total		16	14	



# Issues from Implementation Experience

- Questionnaire Survey by eLC Conformance Committee
  - Results of the questionnaire regarding interoperability problems (14 out of 17 companies)
    - Within SCORM specification; mandatory elements: 8 cases
    - Within SCORM specification; optional elements: 4 cases
    - Outside SCORM specification; 6 cases
- Lack of Information about LMS Specification
  - Implementation detail
  - Usage of optional elements
- Gap of Knowledge and Skills between LMS Engineers and Contents Engineers

# Issues from Implementation Experience

## Research result of Interoperability Problems

No.	Problem Category	Component/Reason	Numer of Questionnaire Returned	Percentage (%)	Solution
1	SCORM Standard Violation (mandatory element)	LMS	1	9	Product revising (*2)
		Content	2		
		Authoring tool	1		
2	SCORM Standard Violation (optional element)	LMS	0	7	
		Content	3		
		Authoring tool	0		
3	Issues caused by SCORM specification	Ambiguity of the specification	4	22	Preparation of additional instruction for SCORM (*3)
		Misleading description, shortage of explanation	6		
4	Problem out of the scope of SCORM		16	36	Preparation of additional standard for SCORM
5	Other requirements		12	26	Publication of the information etc.
Total			45	100	

(\*1) All survey target is eLC member company

Number of all target: 112

Number of responding target: 60

Number of target with problems: 30

(\*2) Training for skilled SCORM engineer by eLC SCORM assessor

SCORM tutorial publication

(\*3) Need cooperation with ADL and other organization

2004/01/30

# Examples of the Problems

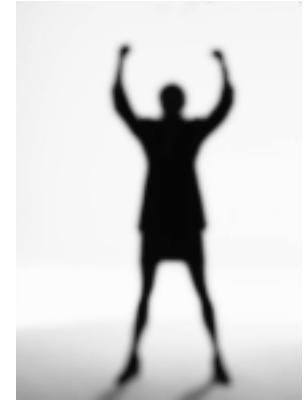
- Problems of Specification
  - Issues related to MasteryScore
    - Shall passing threshold be set in manifest or SCO?
    - MasteryScore is mandatory or optional?
- Problems out of scope of the Specification
  - Capital letter / small letter
    - Sometimes it is ambiguous in the spec., and it matters on Unix or Java platform, resulting trouble
  - Navigation GUI design
    - LMS side policy is required since content cannot control it

# eLC SCORM Assessor Program

- Launch of the eLC SCORM Assessor Program
- System whereby an assessor is placed within the vendor and examines the contents of his/her company
- 3-day seminar held by eLC (tentative)
  - Engineers from the contents vendors participate
  - How to create contents that comply with SCORM
  - How to solve interoperability problems
  - Those who pass the tests become assessors
- The assessor tests the contents by following given procedures
- Examined contents are applied to eLC
- eLC approves the contents as being compliant with SCORM
- Chance to participate in the assessor community hosted by eLC
- The assessor deals with interoperability related problems

# eLC SCORM Assessor Program

- Divergence in Interpretations of the SCORM Specification
- Problems outside the SCORM Specification
- Lack of LMS Information
- Gap in knowledge and technology between LMS engineers and contents engineers



▼  
eLC SCORM Assessor Program is the  
Answer to these Problems

**Launch of the Assessor System  
scheduled for March 2004**

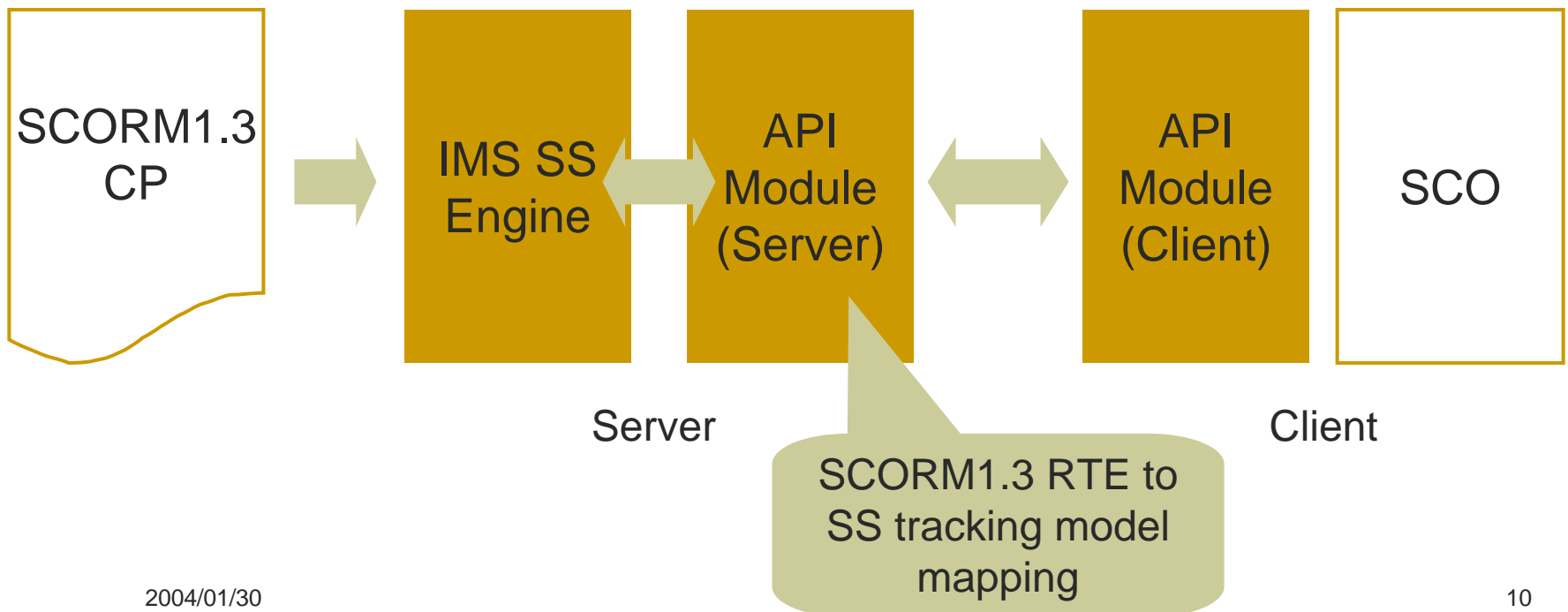


# Platform Development

- e-Learning Standard-based Component and System
- Examples:
  - Year 2000-2001
    - SCORM1.2 based component
  - Year 2002-2003
    - SCORM1.3 based component
    - QTI based component

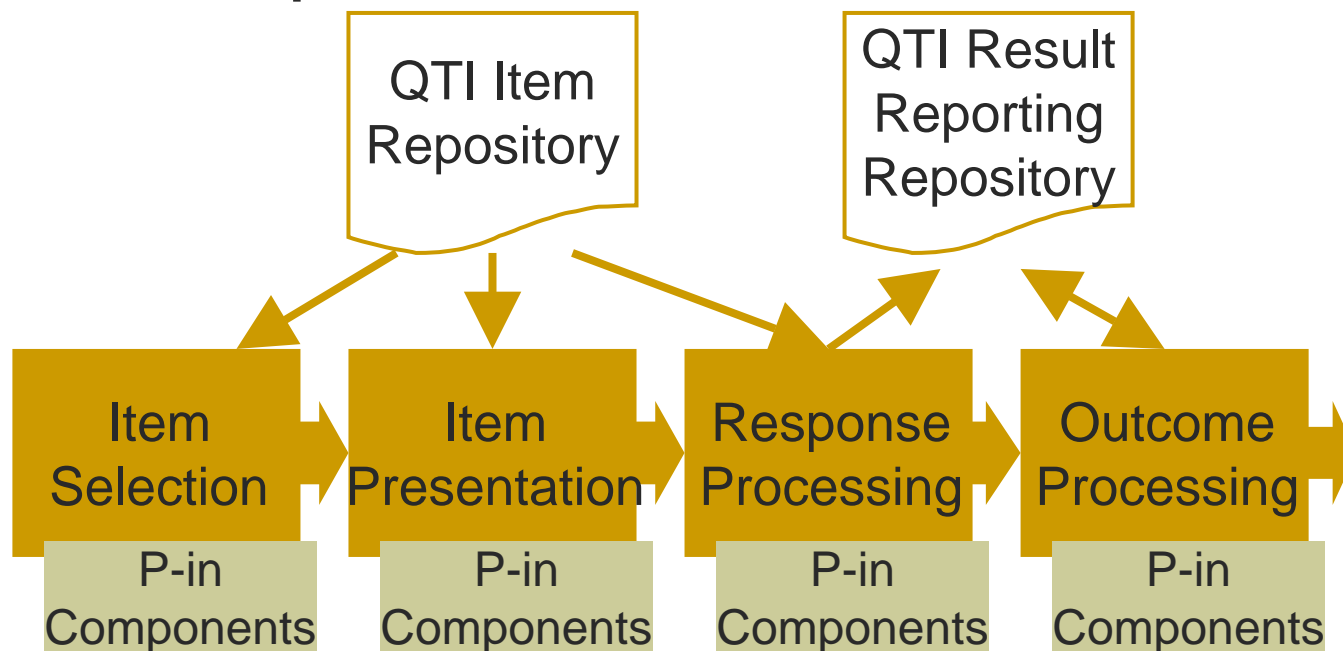
# SCORM1.3 based Component

- Sequencing Engine + RTE module



# QTI based Component

- Module for processing stage and plug-in component



# Future Activities

- Conformance
  - Collaboration with other activities
    - MOU with ADL
    - AEN conformance WG
- Platform
  - Open source software

# About eLC

<http://www.elc.or.jp/>



The screenshot shows the homepage of the Japan e-Learning Consortium (eLC). At the top left is the eLC logo. The main header contains the text: "日本イーラーニングコンソシアム eLC は e-Learning の発展をめざして情報発信します。" Below this is a navigation bar with links for "English", "サイトマップ", "お問い合わせ", and "リンク", along with a search box and a "登録" button. A left sidebar menu lists various site sections. The main content area features a section titled "About e-Learning consortium" with sub-sections: "What is eLC?", "Advantages of eLC member", and "Key activities of eLC".

**MENU**

- 導入ガイド
- 導入事例
- 基本用語集
- 書籍
- フォーラム/イブニング
- eLC 製品情報サイト
- 海外事情
- SCORM
- セミナー / イベント
- ニュースリリース
- eLC とは
- メンバー一覧
- 入会方法
- Members Only

日本イーラーニングコンソシアム  
eLC は e-Learning の発展をめざして情報発信します。

eLC では e-Learning 関連の最新情報を毎月お届けするメールニュースサービスをおこなっています。 [詳細 ▶](#)

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### About e-Learning consortium

#### ◎ What is eLC?

e-Learning Consortium Japan (eLC) was established in April 2001, as a successor of "TBT Consortium", aiming promotion of e-learning. In August 2001, the Tokyo Metropolitan Government legally approved eLC as a Non-Profit Organization. eLC consists of members of 102 companies as of November 25th, 2002.

Key activities of eLC are as follows:

1. Promotion of e-learning technology standardization.
2. Publication of guidelines related to e-learning.
3. Provision of information concerning e-learning.
4. Education of the people engaging in construction, operation, and administration of e-learning systems.
5. Certification of e-learning system and content as standard-conformed product.

Accepting the members from not only vendor companies but also user-side companies and individuals, eLC tries to develop know-how to maximize the effects of e-learning and to widely provide information concerning e-learning.

#### ◎ Advantages of eLC member

1. Acquisition and provision of information related to e-learning  
The members are able to daily acquire latest and enormous information concerning e-learning services and products as well as SCORM standard and interoperability.  
They also have a chance to promote their own services and products via web-page.
2. Cooperation and alliance with other members  
The members, by knowing each other, have opportunities to establish human connections which benefits business cooperation and alliance.
3. Training on e-learning technology  
There are a lot of training chances concerning e-learning technology through committee activities.