

# 電子入札の国際標準開発について

standard of e-Tendering



2006/09/21

UN/CEFACT


TBG6 Vice chair

e-Tendering project leader: 山下純一

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- TBG6における他のプロジェクトについて
- 日本の果たすべき役割
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# 背景と概要 history

- 電子入札システムとTBT協定
  - Technical Barriers to Trade
- No standard(EDIの分野で) ?
  - UN/EDIFACT, ANSI X12, CII(日本)
- UN/CEFACTバルセロナ会議(2002年3月)
  - UN/CEFACTの基で標準開発を行うというEWG D7での基本的合意(資料1) 
- 欧州調査(2002年6月)
  - フランス、スウェーデン、オランダ、UK

# 背景と概要 team

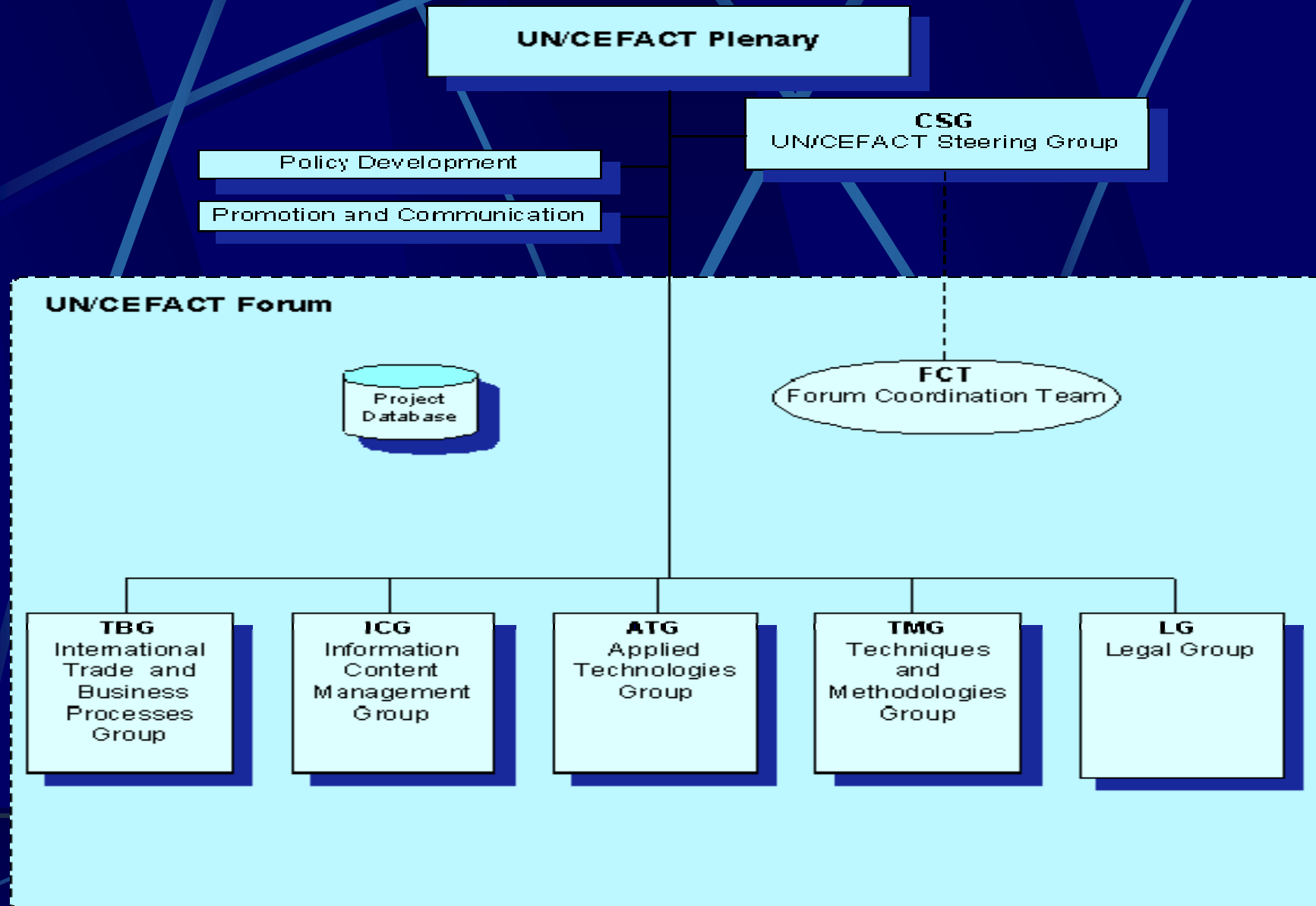
- UN/CEFACT? ISO?
  - UN/CEFACT ForumではTBG6の基でプロジェクトチームを結成
  - ISOの場合はIWA 
  - MoU between IEC,ISO,ITU,UN/ECE 
- 米国調査(2002年8月)
  - DISA,OASYS,GSA,NIST

# 背景と概要 ebXML

## ● ebXMLとは

- レガシー EDI (CII, EDFACT, ANSI X12) vs
- WEB上でビジネスプロセスを共有するオープンEDI
- 標準化はUN/CEFACTとOASYSが担当
- XMLによるEDI

# 開発組織 development



# 開発組織UN/CEFACT

UN/ECE

UN/CEFACT

ATG:

Applied Technologies Group

ICG:

Information Content Management Group

**TBG:**

International Trade and Business  
Processes Group

TMG:

Techniques and Methodologies Group

LG:

Legal Group

**TBG**

TBG1 : Supply Chain Management

TBG2 : Digital Papers

TBG3 : Transportation

TBG4 : Customs

TBG5 : Finance

**TBG6: Architecture,  
Engineering & Construction**

**e-Tendering Project**

TBG7 : Statistics

TBG8 : Insurance

TBG9 : Travel, Tourism & Leisure

TBG10: Healthcare

TBG11: Social Security, Employment & Safety

TBG12: Accounting & Auditing

TBG13: Environmental Management

TBG14: Business Process Analysis

TBG15: International Trade Facilitation

TBG16: EDIFACT Entry Point

TBG17: Harmonization & Documentation

TBG18: Agricultural

# 日本の開発組織 committee

UN/CEFACT

TBG6  
電子入札プロジェクト

日本、フランス、英  
国、ドイツ、スウェー  
デン、チェコ、ベル  
ギー、米国、韓国、  
インド



日本

電子入札国際標準化委員会  
(委員)

委員長: 大橋教授 (中央大学)  
国土交通省、総務省、経済産業省  
JASTPRO、ECOM、FBS、建設技研  
FMMC、SCOPE、JSCIC

電子入札国際標準化WG  
(委員)

コアコンソ正会員ITベンダー、  
総務省関連ITベンダー  
など



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事務局 (JACIC)



# プロジェクトの概要

## eTendering ebXML Standards Project

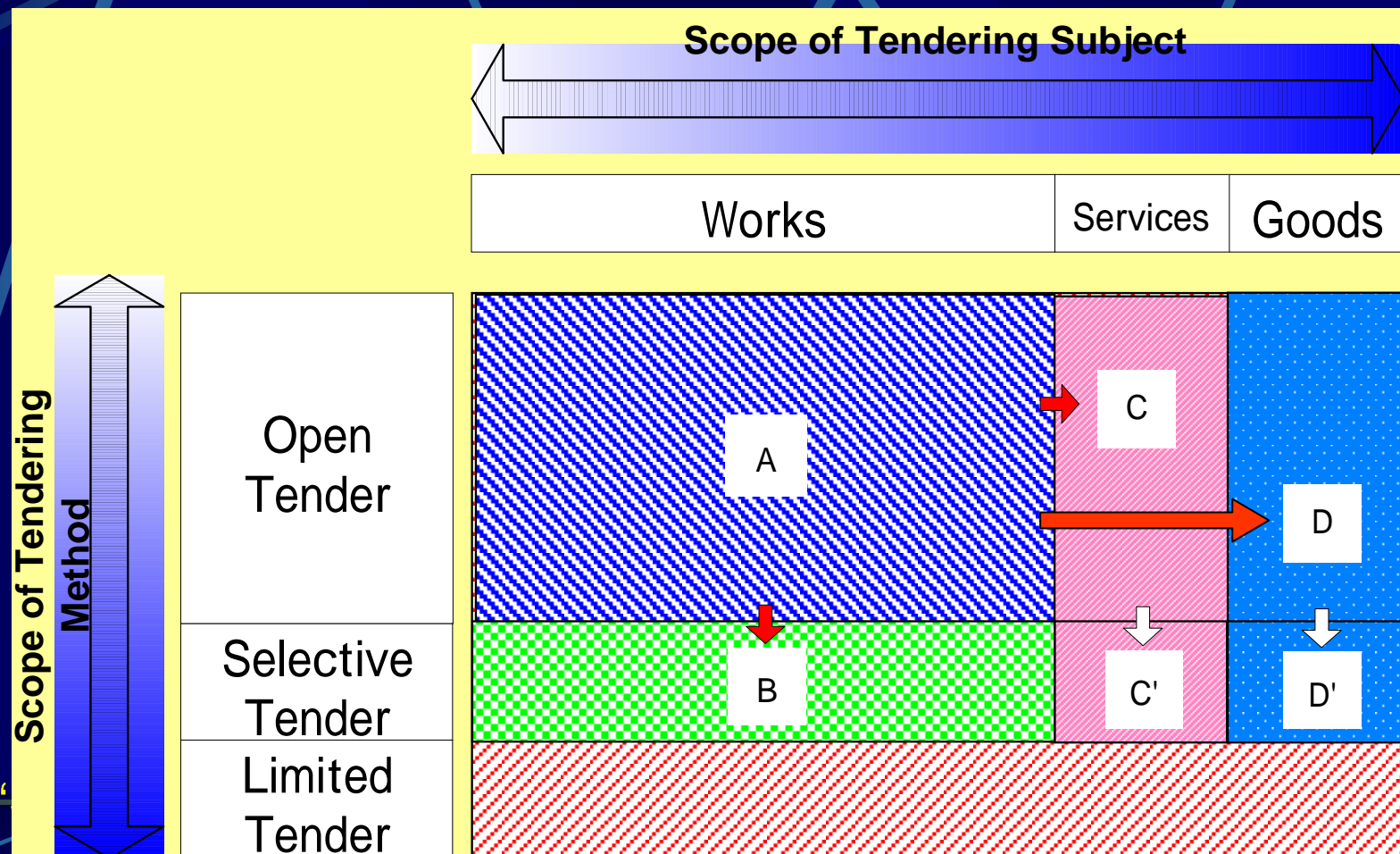
Host: TBG6

### Objectives:

Standardization of business processes,  
transactions and core components in the field  
of electronic tendering/bidding

across industries. >>Inter-sectorial Project

# プロジェクトのScope



# 概要 meeting

## 参加国 partner:

France, UK ,US,Sweden,Germany,Czech Republic,Korea, India, Japan


## 国際会議:

- UN/CEFACT Forum : 8 回
- 中間会議 : 8 回 (パリ、東京、ソウル、ロンドン、ベルリン)
- 電話会議 : 随時 (主としてTBG17と)

## 当面の目標: target

建設工事の政府調達から construction first

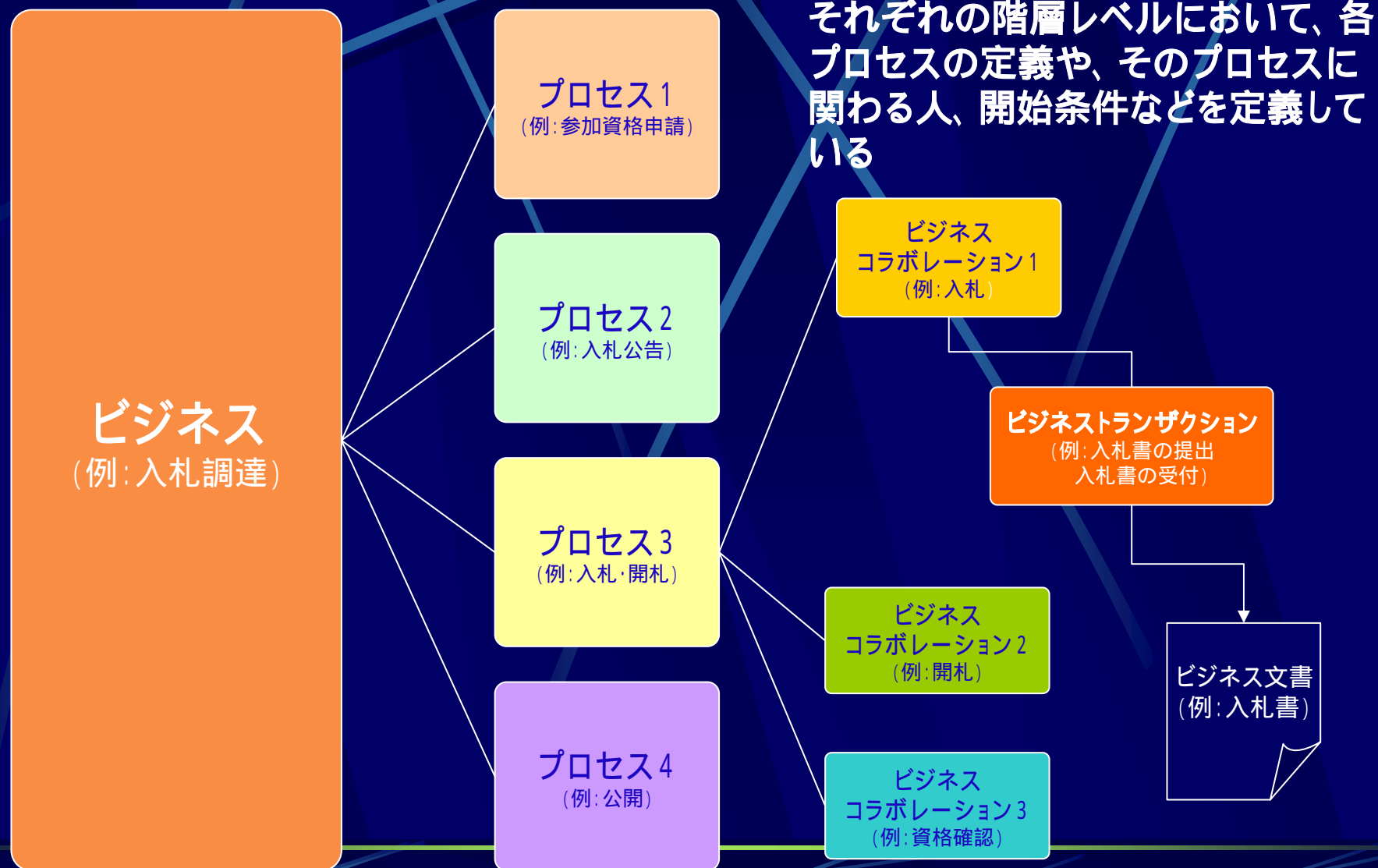
# 開発の経緯

- 2002年9月ジュネーブでは 
  - 選挙から始まった
  - ビジネスプロセスをUMMで記述することから
  - どのようにプロジェクトを進めたら標準文書が承認されるか不明
  - ワークフローが不明
  - 取りあえず2回 / 年のForumのみでは時間が足りないので2回 / 年の中間会議を提案

# 開発の経緯

- 全く新しい体制 (Forum) と新しい技術
- 全く前例が無く手探りで
- 日本に無いプロセスでも国際標準には必要なものもある (BoQ)
- EUとアジア
  - EUのCEN
  - 頼もしいアジアの相棒韓国 (PPS)

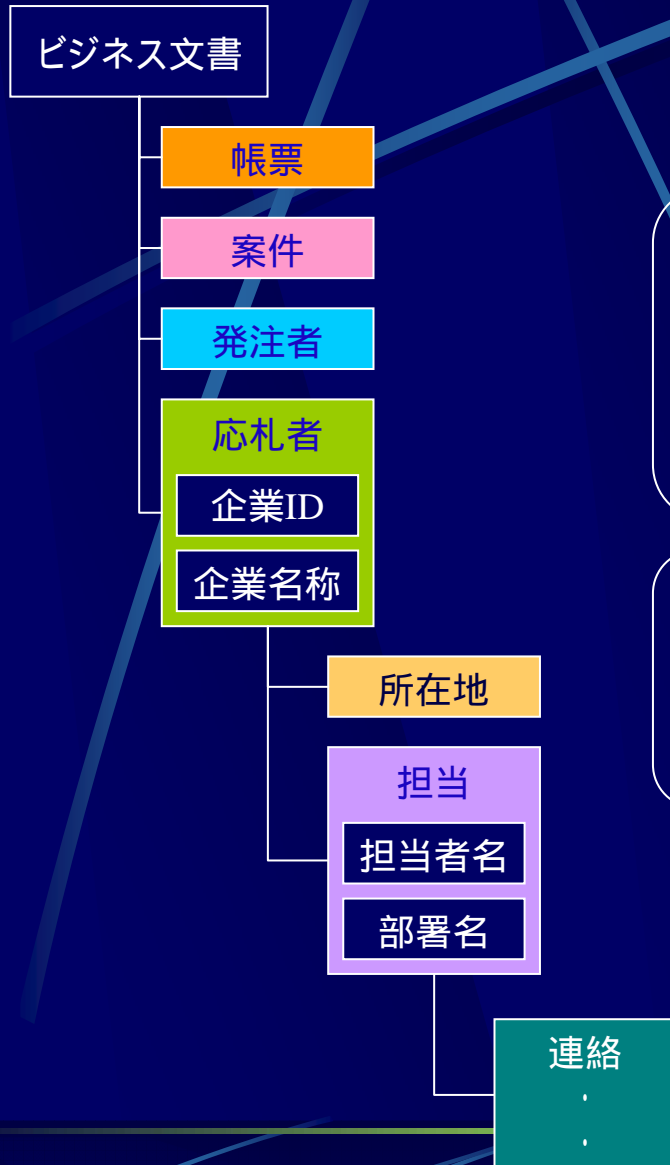
# ビジネスプロセス標準：BRS ( Business Requirement Specification )



## ビジネス情報体 : BIE

(Business Information Entity)

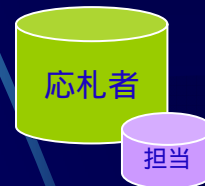
ビジネスの中で使用されるデータ要素



## 集約ビジネス情報体 : ABIE

(Aggregate Business Information Entity)

下層にABIEやBBIEを持っており複数のBIEから構成されているBIE



## 基本ビジネス情報体 : BBIE

(Basic Business Information Entity)

最小レベルのBIE



実際にデータとして使用されるのはBBIEのレベルとなるが、そのBBIEを識別するためにABIEは定義されている

# データ項目標準: RSM (Requirement Specification Mapping)

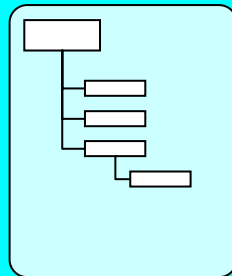
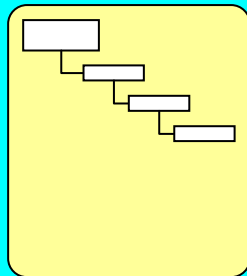
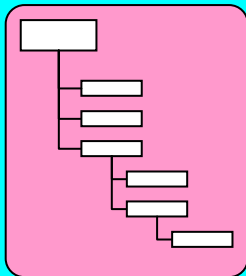
## ビジネス

ビジネス文書  
A

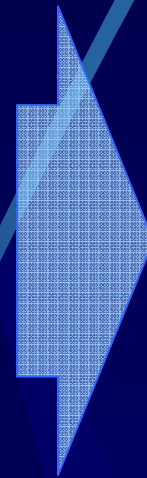
ビジネス文書  
B

ビジネス文書  
C

全てのビジネス文書からデータ要素を抽出



全てのビジネス文書に対してデータ要素の洗い出しを行う

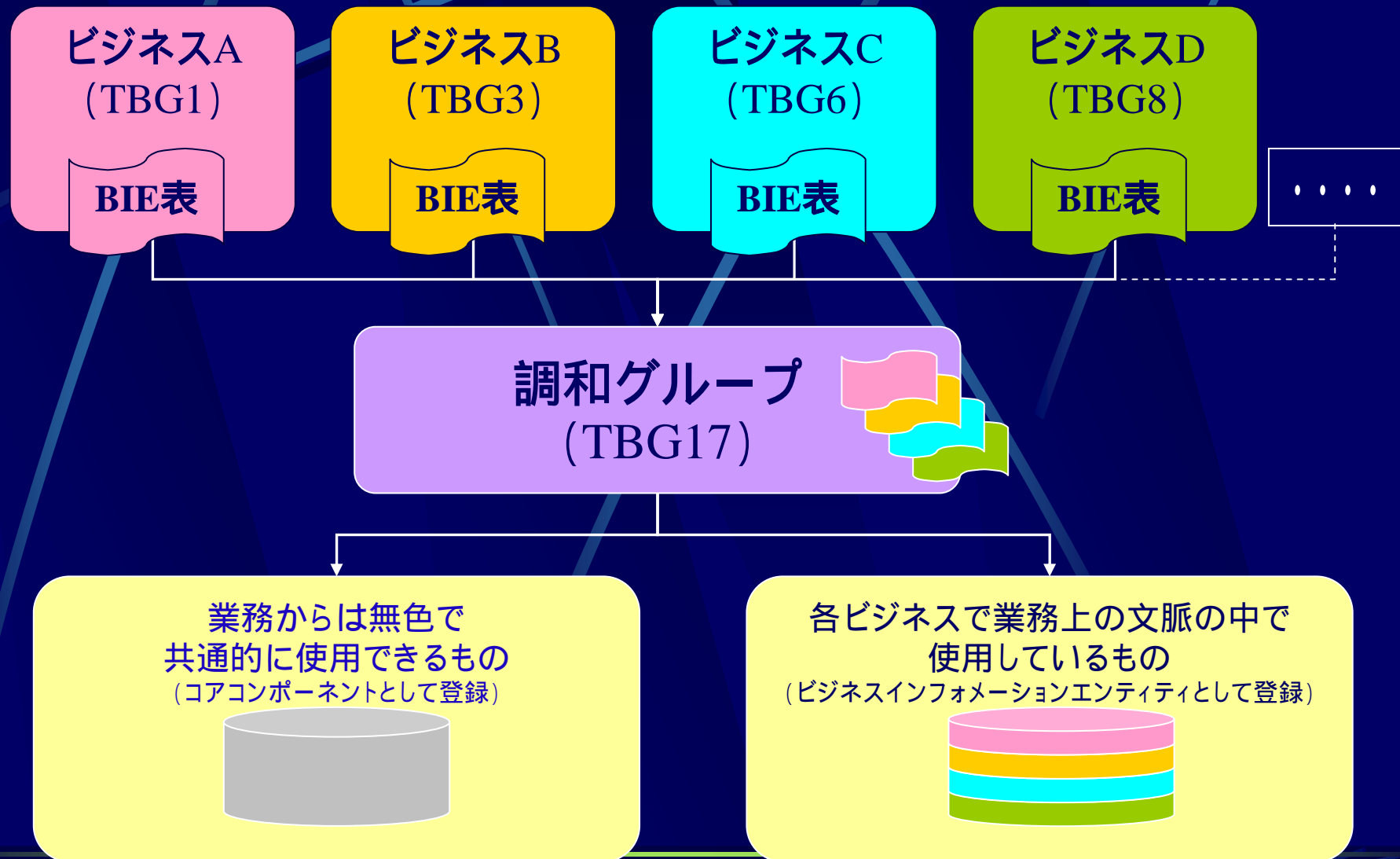


## BIE表


抽出されたデータ要素をまとめてUN/CEFACTの指定された様式にし、項目の意味やこういったビジネス文書で使われているなどの定義を行う

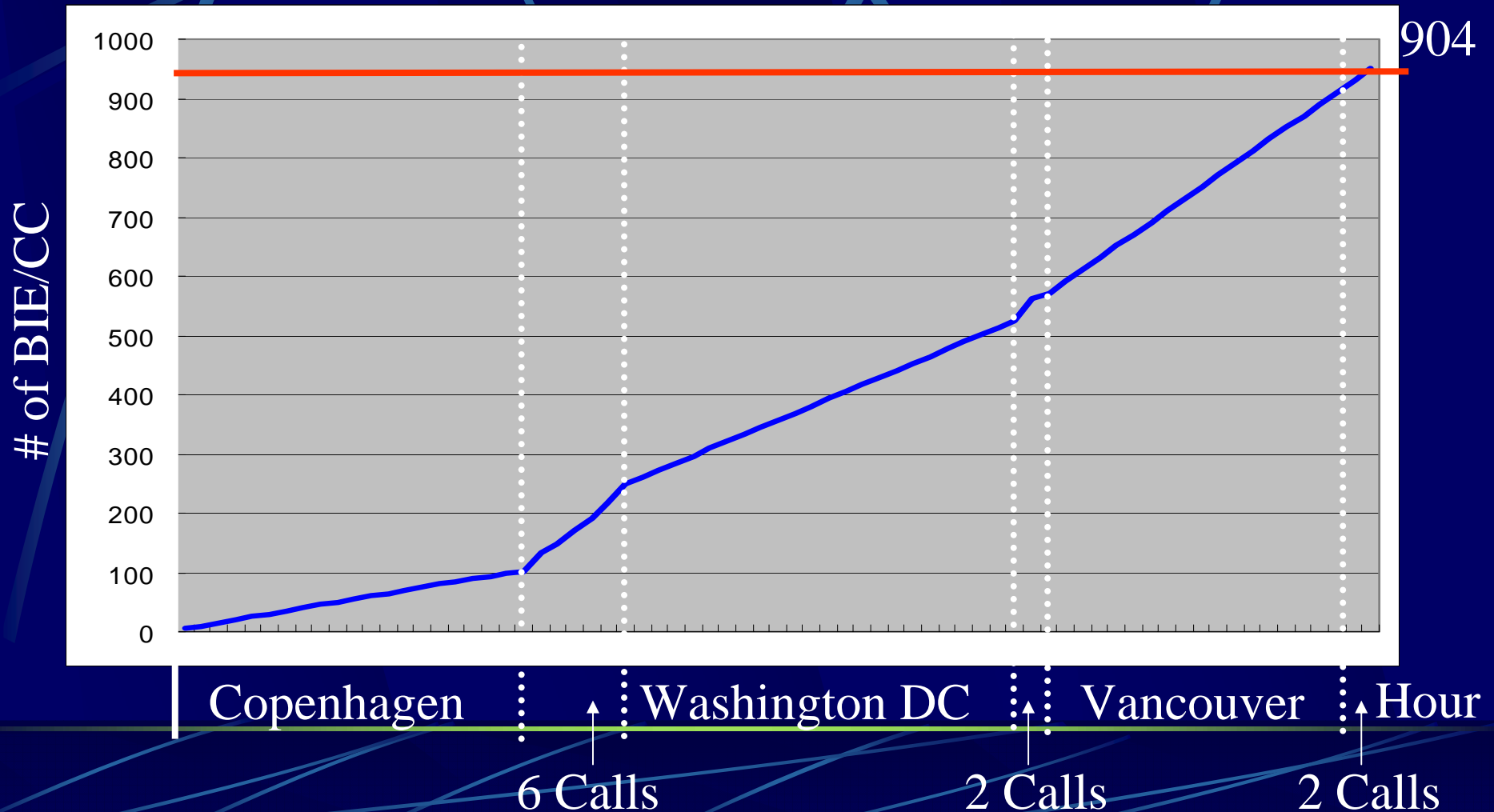


# TGB17によるハーモナイズ



# ハーモナイズ作業の進展

- Before the Vancouver forum: 568 BIEs / CCs
- In the Vancouver forum: 252 BIEs / CCs
- After the Vancouver forum: 84 BIEs / CCs




# 開発の経緯

- 目的地も定かでない雪山を先頭でラッセルしている感じ
- 物品も対象とした時点でTBG1とのJoint Projectとした
- TGB 17 によるHarmonization
  - F2Fとテレコン
- NDR(Naming and Design Rules)
  - BIEをXMLで実装する場合のタグの命名則や構造に関するルール
  - ATG2の要請によるテストも引き受けた



# 標準文書の状況

- BRS(Business Requirement Specification)
  - V1についてはPlenaryで承認済み 
  - V2についてはTBG6内で承認済み
- RSM(Requirements Specification Mapping)
  - TGB17によるHarmonization終了
- XML Schema
  - ATG2によるレビュー待ち

# 今後の予定 future

- ニューデリーにおけるForum
  - 標準としては完成の域に
  - CEFACTとして最初のXMLスキーマを得たとのプレスリリースを予定
- ODPのStep6 実装検証に向けて
  - まだ誰も踏み込んだことがない領域へ、やり方の提案も含めて

# TGB6における他のプロジェクト

- **Project Schedule and Cost Performance Management**
  - PMS間でのデータ交換
  - 米国国防総省とボーイング社が開発主体
- **Contract Financial Execution Management**
  - 建設工事契約以降のプロセス
  - フランス、UK、ドイツ主体

# 日本の果たすべき役割について

- 建設産業は国際標準に無関心で済んだ
- ISO? EDIFACT? 何それ? しかし
- ISO9000,ISO14000で思い知った
- ヨーロッパも韓国も国際標準開発で先行することによって国際市場を狙っている
- 受動態から能動態へ考え方を変えるべきではないか?

 ご清聴ありがとうございました

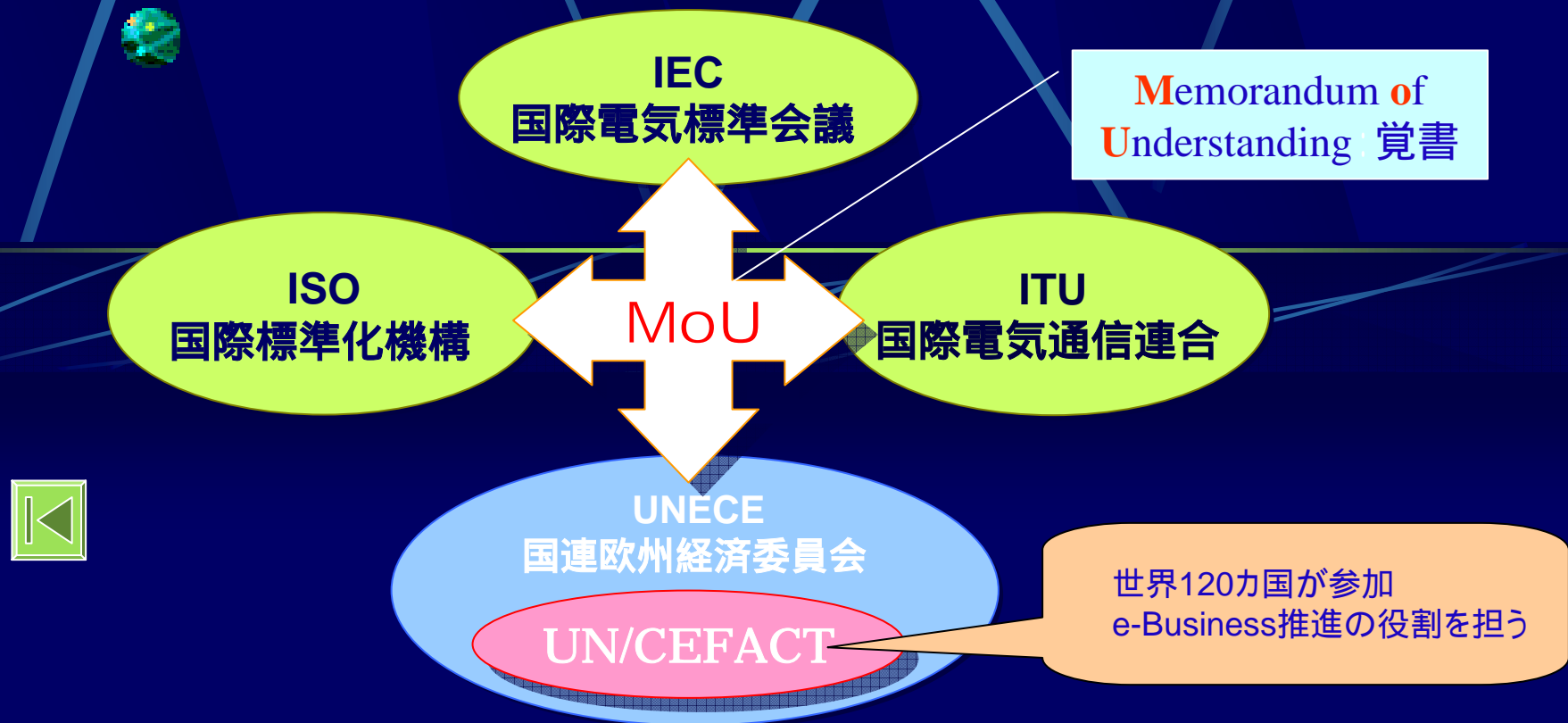




# 国際標準検討機関の関係

- ・技術の拡散や各社の競争的な取り組みに対するリスクを最小限に抑える
- ・労力の重複やユーザーの混乱を防ぐ

上記の目的から他の標準化機関が着手した分野の標準化は行わないとされている。



## 資料1

### **PROJECT 2: e-bidding ebXML standards development.**

Barcelona meeting ends up with the decision to launch a first «intersectorial project»: the launching date will be in September 2002, in the newly established UN/CEFACT Forum.

The Japanese construction delegation will propose a first draft (using UMM methodology) describing the business processes and the first electronic flows. A detailed project specification will be proposed by AEC Group to the « Forum Management Team» before the end of June 2002, in order to gain the ebXML project status and to call for participation from all regions and sectors.



## 資料2



### **International Workshop Agreement (IWA)**

In a related move, the ISO Council has decided to add another mechanism to ISO's armoury for providing normative documents which will not rely on the customary technical committee structures. Essentially this will be through an open workshop mechanism whereby market players will be able to negotiate in a workshop setting the contents of particular normative documents. The results of such workshops would lead to the publication of documents designated as International Workshop Agreement (IWA). An IWA represents then a technical document developed by a workshop outside of the technical structure of ISO with administrative support from a designated member body. The publication of these documents will include an indication of the participating organizations involved in the development of an IWA.

The main benefit of the workshop mechanism is that it enables a more rapid response to requirements for standardization in areas where ISO does not have existing technical structures or experts. The IWA essentially gets a normative document into the marketplace relatively quickly with the opportunity that it will soon establish itself as a de facto standard; the option then exists of transforming it into a full International Standard at a later stage.

While due process remains a fundamental concept to all of ISO's activities, it is hoped that these new procedures and deliverables will demonstrate ISO's willingness to be flexible and responsive to world requirements for technical standards.

Not only should this arsenal of new deliverables help to ensure the relevance of ISO's International Standards on all fronts by responding to current market requirements; if these new types of document help obtain wider diffusion and spread of information and knowledge on new or upcoming areas of technology, thereby strengthening links between standardization and the world of research, then they will be providing an added – ancillary – bonus.

6th UN/CEFACT Forum session approves of five Business Requirements Specifications (BRS) - Sleipnir

ファイル(F) 編集(E) 表示(V) お気に入り(A) グループ(G) セキュリティ(S) プロキシ(P) スクリプト(R) ツール(T) ウィンドウ(W) ヘルプ(H)

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アドレス http://www.unece.org/press/pr2005/05trade\_p02e.htm

地図の表示-goo... 埼玉県越谷BMW... ぐるなび - 木曾... 単価契約とは... ebXMLとは UMM... http://www.eco... 6th UN/CEFACT...

検索 次を検索 前を検索



UNECE

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SEARCH

SITEMAP

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## PRESS RELEASE

[Index]

### 6th UN/CEFACT Forum session in Kuala Lumpur, Malaysia, approves five Business Requirements Specifications (BRS)

Geneva, 23 March 2005 - Significant future improvements in trade facilitation will result from the adoption, by software makers, of the electronic business and trade facilitation standards. To achieve these improvements, UN/CEFACT has placed at the centre of its e-Business strategy three fundamental elements:

- Cross-sectoral analysis (to promote interoperability and supply chain synchronicity);
- Business process and information modelling (to capture user requirements, independent of any specific technology, through the creation of business collaboration models); and
- Mapping to new technologies as they emerge (e.g., eXtensible Markup Language (XML), Web Services, shared and/or distributed objects, etc.).

The vast breadth of business knowledge will be captured by Business Requirement Specifications (BRS) that are independent of the underlying technology and explicit means of implementation. The benefits to the users will be the protection of existing infrastructure investments by reducing the cost of transitioning to new technologies.

At the UN/CEFACT Forum meeting, held in Kuala Lumpur from 14 to 18 March 2005, the Steering Committee of the International Trade and Business Processes Permanent Group (TBG) formally approved the **first** Business Requirement Specifications (BRS) to be submitted to the next UN/CEFACT Plenary session for approval as **UN/CEFACT Business Standards**, namely:

- Cross industry invoice;
- Cross industry remittance advice;
- BoostAero e-Supply Chain;
- Material Safety Data Sheet;
- E-Tendering.

A description of each of these BRS follows.

#### Cross Industry Invoice

The commercial invoice is an important document exchanged between trading partners. In addition to its prime function as a request for payment, from the customer to the supplier, the invoice is an important accounting document and has potential legal implications for both trading partners.

The purpose of this document is to define globally consistent invoicing processes for worldwide supply chains, using a UN/CEFACT Modelling Methodology (UMM) approach and Unified Modelling Language to describe and detail the business processes and transactions involved.

#### Cross Industry Remittance advice

The remittance advice process is part of the payment process for the transfer of funds between the customer and the

## **e-Tendering**

The objective of this work is the standardization of business processes, transactions and business information entities in the field of electronic tendering/bidding across industries. Version 1.0 focuses especially on the Works domain. The Goods and Services domains will be included in Version 2.0.

This document was developed by an eTendering project within TBG6 (Architecture, Engineering and Construction) under Mr. Jun-Ichi YAMASHITA (Fujita Business System Inc. / Japan) as the project leader, and with Czech Republic, France, Germany, Japan, Republic of Korea, Sweden and the United Kingdom as participating member countries.

 For further information, please contact:

Mr. Jean Kubler  
Acting Chief, Global Trade Solutions Branch  
UNECE Trade Development and Timber Division  
CH - 1211 Geneva 10, Switzerland

Phone: +41 (0) 22 917 2774  
Fax: +41 (0) 22 917 0037  
E-mail: [jean.kubler@unece.org](mailto:jean.kubler@unece.org)  
Web site: <http://www.uncefact.org>

CEFACT

United Nations Centre for Trade Facilitation and Electronic Business

Business Requirement Specifications (BRS)

Title	Status
<a href="#">Business Requirements Specification (BRS) of the Cross industry invoice</a> Short description can be found in document <a href="#">TRADE/CEFACT/2005/20</a> <a href="#">[Eng]</a> <a href="#">[Fre]</a> <a href="#">[Rus]</a>	approved
<a href="#">Business Requirements Specification (BRS) of the Cross industry remittance advice</a> Short description can be found in document <a href="#">TRADE/CEFACT/2005/21</a> <a href="#">[Eng]</a> <a href="#">[Fre]</a> <a href="#">[Rus]</a>	approved
<a href="#">Business Requirements Specification (BRS) of the BoostAero supply chain Business</a> Short description can be found in document <a href="#">TRADE/CEFACT/2005/22</a> <a href="#">[Eng]</a> <a href="#">[Fre]</a> <a href="#">[Rus]</a>	approved
<a href="#">Requirements Specification (BRS) of the Material Safety Data Sheet (MSDS) Information</a> Short description can be found in document <a href="#">TRADE/CEFACT/2005/23</a> <a href="#">[Eng]</a> <a href="#">[Fre]</a> <a href="#">[Rus]</a>	approved
<a href="#">e-Tendering Business Requirement Specification</a> Short description can be found in document <a href="#">TRADE/CEFACT/2005/24</a> <a href="#">[Eng]</a> <a href="#">[Fre]</a> <a href="#">[Rus]</a>	approved
<a href="#">Business Requirements Specification (BRS) of the Export Certification</a> Short description can be found in document <a href="#">TRADE/CEFACT/2005/36</a> [English Only]	approved



# ОРГАНИЗАЦИЯ ОБЪЕДИНЕННЫХ НАЦИЙ

# E



## ЭКОНОМИЧЕСКИЙ И СОЦИАЛЬНЫЙ СОВЕТ



Distr.  
GENERAL

TRADE/CEFACT/2005/24  
11 April 2005

RUSSIAN  
Original: ENGLISH

## ЕВРОПЕЙСКАЯ ЭКОНОМИЧЕСКАЯ КОМИССИЯ

КОМИТЕТ ПО РАЗВИТИЮ ТОРГОВЛИ, ПРОМЫШЛЕННОСТИ  
И ПРЕДПРИНИМАТЕЛЬСТВА

Центр по упрощению процедур торговли и  
электронным деловым операциям (СЕФАКТ ООН)

Пункт 8 предварительной повестки дня  
Одиннадцатая сессия, 20-23 июня 2005 года





# ハーモナイズ作業の結果

		Harmonized	Approved	Withdrawn
BIE		652	406	246
	ABIE	98	64	34
	BBIE	403	265	138
	ASBIE	151	77	74
CC		252	141	111
	ACC	28	14	14
	BCC	148	91	57
	ASCC	76	36	40

## 2. 電子入札国際標準の検討経緯

- ・ UN/CEFACT バルセロナ会議(2002 年3 月)に参加して日本の電子入札の取組について説明。日本の取組が高く評価され、「電子入札国際標準化プロジェクト」の発足を決議し、日本が幹事国となる。
- ・ 2002 年5 月に、UN/CEFACT に向けた国内調整を行う「電子入札国際標準化委員会」を設置。(委員構成は別紙2)
- ・ 2004 年3 月に日本から国際標準原案を提案。
- ・ 2005 年6 月20 日～23 日に開催されたUN/CEFACT 総会で承認、国連の正式文書として国際標準第1版が制定される。

## 3. 国際標準の概要

- ・ 国際標準第1版では、発注者と応札者間の手続の処理手順、及び処理されるデータ項目を定義している。
- ・ 国際標準文書は、BRS(Business Requirement Specification)と呼ばれるUN/CEFACT における標準文書形式に基づいて作成されている。これにより、システム内部の処理手順が国際標準文書により確認出来る、また、諸外国が電子入札システム構築の際の設計仕様へ利用することが出来るものである。







コア構成要素のメタモデル、つまりコア構成要素という概念自体の定義は、Core Components Technical Specification ( CCTS, コア構成要素技術仕様 ) に記述されている。CCTSはUN/CEFACT TMGが開発しており、ISOによってISO/TS 15000-5として承認されている。

CCTSのメタモデルでは、Core Component ( CC, コア構成要素 ) と Business Information Entity ( BIE, ビジネス情報項目 ) というふたつの概念が中心となる。前者は特定の業務文脈に依存しない、いわば無色の概念である ( 例えば「住所」 ) 。一方後者のBIEは、CCを元にして、業務上の文脈を付加した概念であり ( 例えば「配送先住所」 ) 、最終的にXMLの要素として表現されるのはBIEである。

# UN/CEFACT Open Development Process

For maintenance and approval of the core ebXML Technical Specifications, UN/CEFACT will apply its Open Development Process (ODP). The ODP is developed for the UN/CEFACT working groups in order to develop and evolve Technical Specifications using an open and inclusive process that produces high-quality specifications in "Internet-time".

Application of the ODP supports the five main goals that drive development activities within UN/CEFACT: **openness, world-wide participation, speed, compatibility and technical excellence.**

The ODP prescribes the following steps when developing a Technical Specification:

1. Proposing a new specification
2. Compiling a requirement list
3. Writing the first working draft
4. Refining the first working draft
5. Public review
6. Implementation verification
7. Final Technical Specification release
8. Maintenance

UN/CEFACT's experience has proven that the best way to develop a specification that meets all its process goals is to start with a very small editing group and have them write a first working draft in close consultation with industry experts who have a deep understanding of the business process in question.

December 14, 2006

## Completion of Development of International Standard for Electronic Bidding Based on Electronic Bidding Systems in Japan

Under the supervision of UN/CEFACT\*1 (which is under the control of the UN Economic Commission for Europe and dedicated to standardization of EDI (electronic data interchange) and electronic commerce), a project team led by Japan accomplished the development of the world's first international standard for electronic bidding using the latest technology in the Internet era. Upon development of this international standard, the base was created first based on the Electronic Bidding Core System\*2, which is used in Japan by the Ministry of Land, Infrastructure and Transport, and the Electronic Bidding and Bid Opening System\*3 used by the Ministry of Internal Affairs and Communications, and then it was generalized and standardized by incorporating opinions of the member countries into it. Therefore, the countries to adopt this standard will come under the influence of Japan.

### 1. Overview

UN/CEFACT is part of the United Nations Economic Commission for Europe and a global organization for international standardization which is dedicated to standardization of EDI and electronic commerce. UN/CEFACT has signed a MOU (memorandum of understanding)\*4 with ISO (International Organization for Standardization), ITU (International Telecommunication Union), and IEC (International Electrotechnical Commission) and shares tasks with them. There has been an international bidding standard called EDIFACT (Electronic Data Interchange for Administration, Commerce, and Transport). EDIFACT is, however, a standard developed under the EDI environment in 1980s, and therefore there have been increasing demands for the development of a new standard for electronic bidding using the present Internet technology. Also, conventional standards were usually developed by each business industry, and there was no cross-industry standard. Meanwhile, Japan had started the operation of electronic bidding on the Internet before it was assigned to the development of an international standard. The Ministry of Land, Infrastructure and Transport and JACIC, which were enthusiastic about the establishment of an international standard for electrical bidding, presented Japan's engagement in electronic bidding during the UN/CEFACT international conference in March 2002. As a result, in the UN/CEFACT international conference in September 2002, an international standard project for electronic bidding was established, and Japan was assigned to the leader of the project. Since then, Japan has strived to develop an



international standard for electronic bidding. In this project, discussions were made to work out an international standard for the processes and data items of cross-industry electronic bidding.

## 2. International Standard for Electronic Bidding

It was determined to start international standardization of electronic bidding with public works procurement and progressively expand it to services (duties and labor) and goods procurement. Firstly, the base of an international standard was created based on the bidding processes and electronic bidding systems used in Japan, and then it was generalized and standardized by incorporating opinions of the member countries into it.

During the UN/CEFACT general assembly meeting held in June 2005, this international standard for electronic bidding was officially released by UN/CEFACT as the International Standard for Electronic Bidding (public works procurement) Version 1.0. After that, the scope of the standard was expanded to services (duties and labor) and goods, and the International Standard for Electronic Bidding Version 2.0 (construction works, services (duties and labor), and goods) was completed during the UN/CEFACT international conference in October 2006, waiting for official release by UN/CEFACT.

The International Standard for Electronic Bidding consists of the necessary processes for electronic bidding, standard of the data items required for the processes, and XML schemer\*5 which was created based on these processes and data items.

In September 2002, UN/CEFACT carried out a major organizational reform, which drastically changed its organization and standardization approach, and processes and workflows for the development of standards were not established yet at the time when this project was established.

Consequently, this project, which took the initiative in the development of an international standard under the new organization, unexpectedly contributed to the establishment of standardization processes and documentation rules for standards. The international standard for electronic bidding is the first international standard developed under the new organization of UN/CEFACT.

## 3. Validity Check of International Standard for Electronic Bidding

When the development of the international standard for electronic bidding was completed, a validity check of this international standard (to check if an electronic bidding system can be actually established using this standard) was required. A validity



check is one of the processes for the development of international standards defined by UN/CEFACT. Taking the lead of other countries, Japan carried out a validity check of the international standard using its Electronic Bidding Core System and Electronic Bidding and Bid Opening System. The result of the validity check was presented during a UN/CEFACT international conference and approved as a successful example. Following the example of Japan, India, South Korea, and some countries in Europe are now making preparations for a validity check of the international standard.

#### 4. Achievements

This international standard, which was developed on the initiative of Japan, was based on the electronic bidding systems in Japan, and a lot of contributions were made by the Japanese team. Thus, it can be said that the countries to implement an electronic bidding system using this standard will come under the influence of Japan. Moreover, Japan produced significant results including the development of the international standard for electronic bidding, which is the first achievement after the new organization of UN/CEFACT was established, support for the establishment of internal regulations within UN/CEFACT and documentation rules, and contribution to other international standardization in the future. Furthermore, the conformity of the electronic bidding processes and data items in Japan to the international standard was internationally admitted as the result of the UN/CEFACT international conference held in October 2006. In other words, it was proved that the electronic bidding systems in Japan (the Electronic Bidding Core System and Electronic Bidding and Bid Opening System) conform to the international standard.

## <Glossary>

### \*1 UN/CEFACT (Center for Trade Facilitation and Electronic Business):

The world's largest standardization organization which is under the control of the United Nations Economic Commission for Europe and in which 120 countries across the world take part. Some 242 people from 38 countries attended its international conference held in October 2006.

### \*2 Electronic Bidding Core System:

An electronic bidding system which was developed by the Japan Construction Information Center (JACIC) and the Service Center of Port Engineering (SCOPE) based on the system released for free by the Ministry of Land, Infrastructure and Transport for public works and services to create a system that public purchasers can use for general purposes. This system has been adopted by more than 400 public purchasers, including joint operations, of public corporations, government organizations, and local governments, such as the Ministry of Land, Infrastructure and Transport, Ministry of Finance, Ministry of Agriculture, Forestry and Fisheries of Japan, Ministry of Education, Culture, Sports, Science and Technology, Ministry of Justice, and Ministry of Health, Labor and Welfare.

### \*3 Electronic Bidding and Bid Opening System:

An electronic bidding system for goods and services developed by the Ministry of Internal Affairs and Communications and disclosed for free. This system has been adopted by the Ministry of Internal Affairs and Communications, Ministry of Foreign Affairs, Ministry of Economy, Trade and Industry, Cabinet Office (joint operation with Financial Services Agency), Ministry of Environment, and National Police Agency. Among the prefectural and city governments, Nagano prefecture and others have adopted it.

### \*4 MoU (Memorandum of Understanding)

Signed among ISO (International Organization for Standardization), ITU (International Telecommunication Union), IEC (International Electrotechnical Commission), and UNECE (United Nations Economic Commission for Europe). It aims at minimizing the risks of dispersion of technology and competitive activities and avoiding overlapping work and confusion to the users. It defines that the parties must not go in for standardization in the field for which any of other parties started standardization activities.

**\*5 XML Schemer:**

The XML schemer is a specification which defines structures and tags of the XML document proposed by the W3C (World Wide Web Consortium: an organization to standardize the WWW).

UN/CEFACT defines that BRS (Business Requirement Specification), which is a standard for the processes, should be used as a standard document, and that RSM (Requirement Specification Mapping), which is a standard for the data items, and the XML schemer should be attached as technical specifications.