

**IEEE Workshop:
Panel Discussion on How IEEE Supports
Young Professionals and Practitioners
in Japanese Industry**

View from a national SDO; TTC

- 1. What is TTC?**
 - 2. Values of ICT standardization**
 - 3. Global Standards Collaboration**
- Appendix**

**November 8, 2014
Yoichi MAEDA
TTC**



Self-introduction



Yoichi MAEDA

CEO & SVP

TTC (The Telecommunication Technology Committee)

<http://www.ttc.or.jp/maedablog/>

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- **1980 April** Join NTT (R&D Laboratories)
- **1988 April** Exchange research engineer in BT of UK
- **1989** Start standardization activities in CCITT (ITU-T)
- **2000-2004** Vice-Chairman of ITU-T SG13 (Broadband NW)
- **2005-2012** Chairman of ITU-T SG15 (Transport NW)
- **2006 April** Join NTT Advanced Technology Corporation
- **2010-Now** Join TTC
- **2013-2016** Chairman of ITU-T Review Committee
- **2014-2016** Chairman of ASTAP (Asia-Pacific Telecommunity Standardization Program)

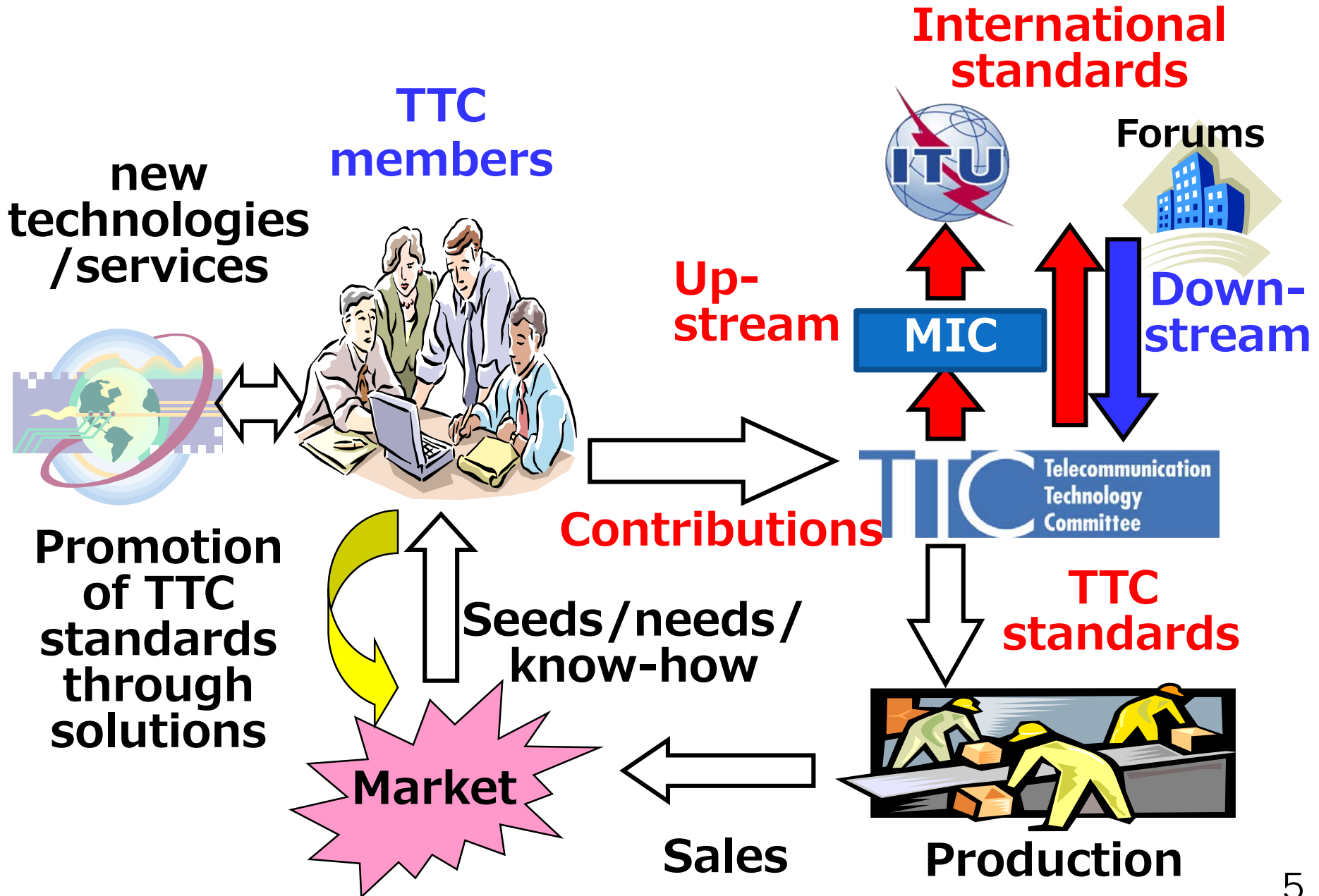
What is TTC ?

- ❑ **TTC is a private and non-profit Standards Developing Organization (SDO) accredited by the Japanese Administration (MIC) in Japan.**
- ❑ **Established in 1985 when NTT was privatized.**
- ❑ **TTC's mission is to develop and disseminate the TTC standards related to Information and Communication networks and their applications/solutions.**
- ❑ **TTC is an SDO qualified by ITU-T Rec. A.5 so that ITU-T Recommendations can include references to TTC Standards.**
- ❑ **TTC is also an SDO qualified by ITU-T Rec. A.6 for cooperation and exchange of information in the sense that ITU-T and its Study Groups can make use of TTC standards for their studies.**

Why do we need national standards?

- ❑ WTO Agreement on Technical Barriers to Trade (TBT) requires **international standards** essential and applicable to the technical specifications for **international fair procurement and trade** in each country, but international standards may sometimes be the products of “compromise” which result in **a lot of options/ambiguity**.
- ❑ International standards do not always reflect adequately **national market demands/ requirements** including regulations.
- ❑ International standards may sometimes be understood in a different manner when applied to the practical implementation, which result in **end-to-end interoperability problems**.

Driving-forces of TTC standards



Stakeholder's views on values of Standardization

Manufacturers

- ◆ Increase product value
- ◆ Expand market
- ◆ Decrease product cost

Common values

- ◆ *Share in R&D*
- ◆ *Collaboration*

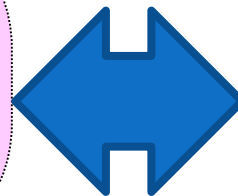
Service providers

- ◆ Increase service value
- ◆ Expand market
- ◆ Decrease provision cost
- ◆ Stabilize procurement



Users

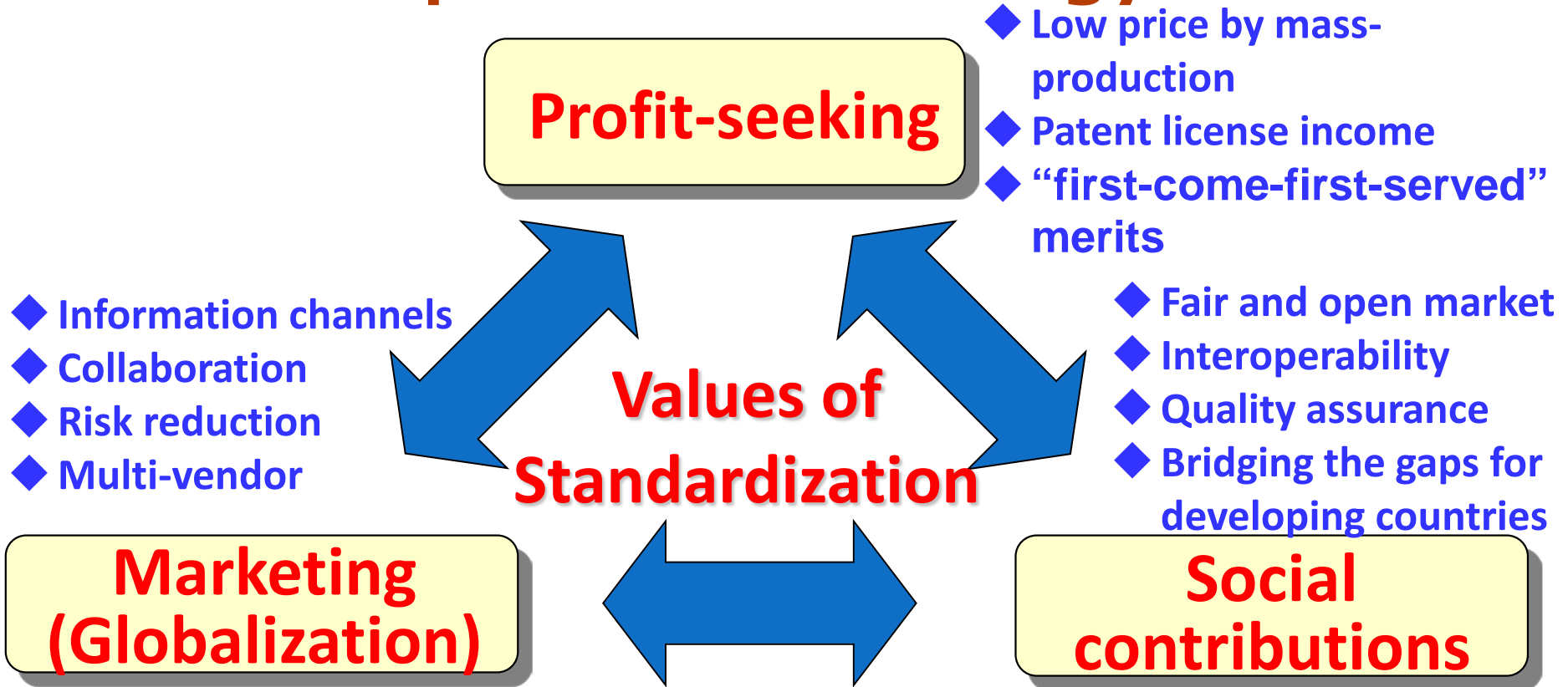
- ◆ Increase user's convenience
- ◆ Decrease product cost and communication fees



Administrations

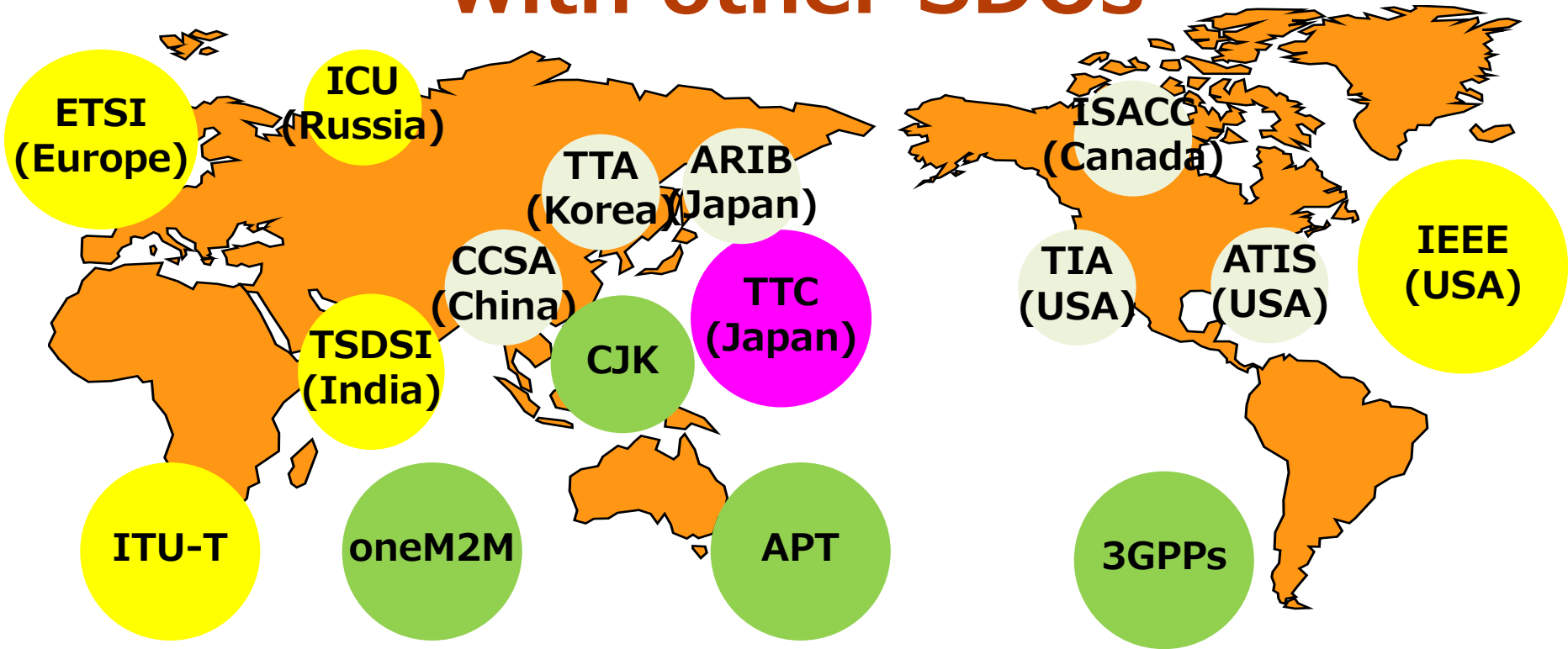
- ◆ Ensure fair competition
- ◆ Regulate quality and safety

Key elements for standardization promotion strategy



- ◆ Management decisions to include Standards strategy in the business strategy
- ◆ Continuous support to Standardization
- ◆ Human resource development for Standardization

TTC's strategic collaboration with other SDOs



Forms of collaboration	Standards Development Organizations
Affiliate member	APT/ASTAP
Core member	CJK, GSC, oneM2M, 3GPPs
MoU on collaboration	ITU-T, IEEE-SA , ETSI, TSDSI, GISFI, etc.

GSC

(Global Standards Collaboration)

- ❑ GSC is not a standards development organization but a collaboration scheme since 1990.
- ❑ GSC is an unincorporated voluntary organization dedicated to enhancing global cooperation and collaboration regarding communications standards development environment.
- ❑ Members: ARIB (Japan), ATIS (USA), CCSA (China), ETSI (Europe), ISACC (Canada), ITU, TIA(USA), TTA (Korea), TTC (Japan), IEEE-SA, TSDSI(India)
- ❑ **IEEE-SA has joined GSC in 2014.**
- ❑ See <http://www.itu.int/ITU-T/gsc/index.html>

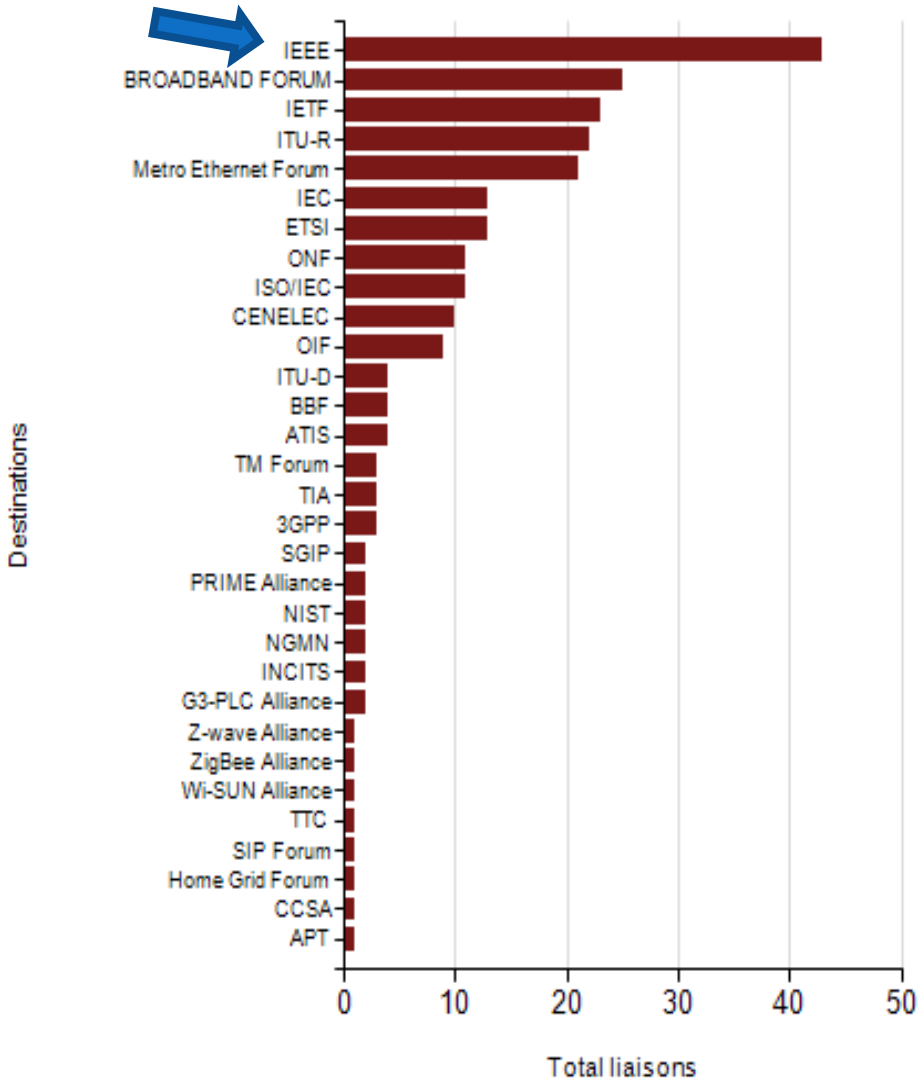
ITU-T Review Committee

Background of the Resolution on Review Committee

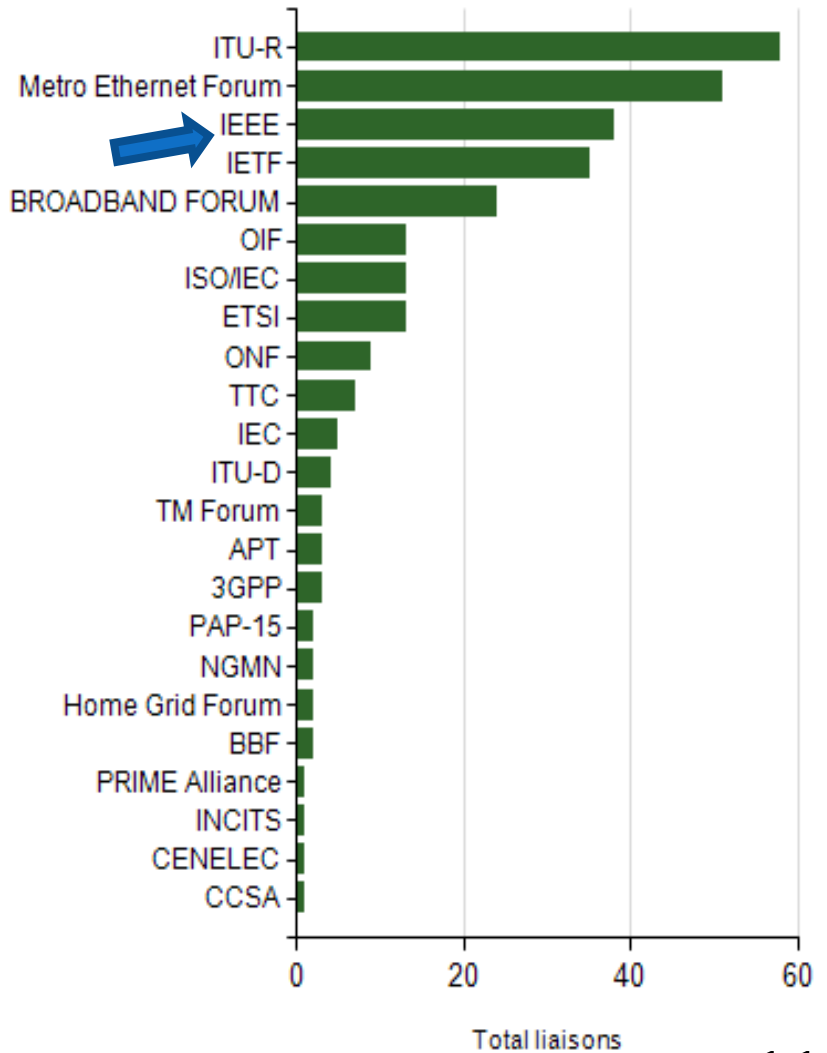
- ◆ There is a need to consider improvements in coordination and collaboration arrangements between ITU-T and ITU-R, ITU-D, other standards making entities, and other relevant entities, while avoiding overlap with ITU-T functions.
- ◆ Examine the adequacy of the current structure of the ITU-T to meet the market.
- ◆ Review the current coordination and collaborations mechanisms with other standards bodies.
- ◆ Identify ways and means to enhance cooperation with other standards.
- ◆ Develop and propose recommendations for a set of principles for standards development within ITU-T.

Collaboration between IEEE and SG15 on Optical Core&Access Transport standards

Liaison statements addressed to other groups outside ITU-T from the study group



Liaisons addressed to the study group from other groups outside ITU-T



From 2013 Jan. – 2014 Sept.

Appendix

- **Types of standards organizations**
- **Additional information on TTC**
- **Education for standardization**

Standards types and the organizations

◆ De jure standard :

- ITU (International Telecommunication Union)
- ISO (International Standards Organization)
- IEC (International Electrotechnical Commission)
- ISO/IEC JTC1 (ISO/IEC Joint Technical Committee 1)

◆ Forum standard :

- IETF (Internet Engineering Task Force)
- **IEEE (Institute of Electrical and Electronics Engineers)**
- W3C (World Wide Web Consortium)

◆ De facto standard :

- MS-Windows
- Apple OS (iOS)
- Google OS (Android)

Definition of International standards in WTO TBT agreement

The WTO's TBT Committee has adopted a Decision on Principles for the Development of International Standards, Guides and Recommendations, which should be adhered to when developing international standards. The following six principles should be applied for International Standards.

Such standardization bodies include ITU, ISO, IEC, ISO/IEC JTC1.

- ◆ Transparency
- ◆ Openness
- ◆ Impartiality and Consensus
- ◆ Effectiveness and Relevance
- ◆ Coherence
- ◆ Development dimension

De-Jure Standards in regional types

◆ International/Global standards

- ITU : UN specialized agency for information and communication technologies; ICTs
- ISO : International Standards for products, services and systems
- IEC : International Standards for all electrical, electronic and related technologies
- ICAO : UN specialized agency on International Civil Aviation
- IMO : UN specialized agency on the safety and security of shipping and the prevention of marine pollution by ships

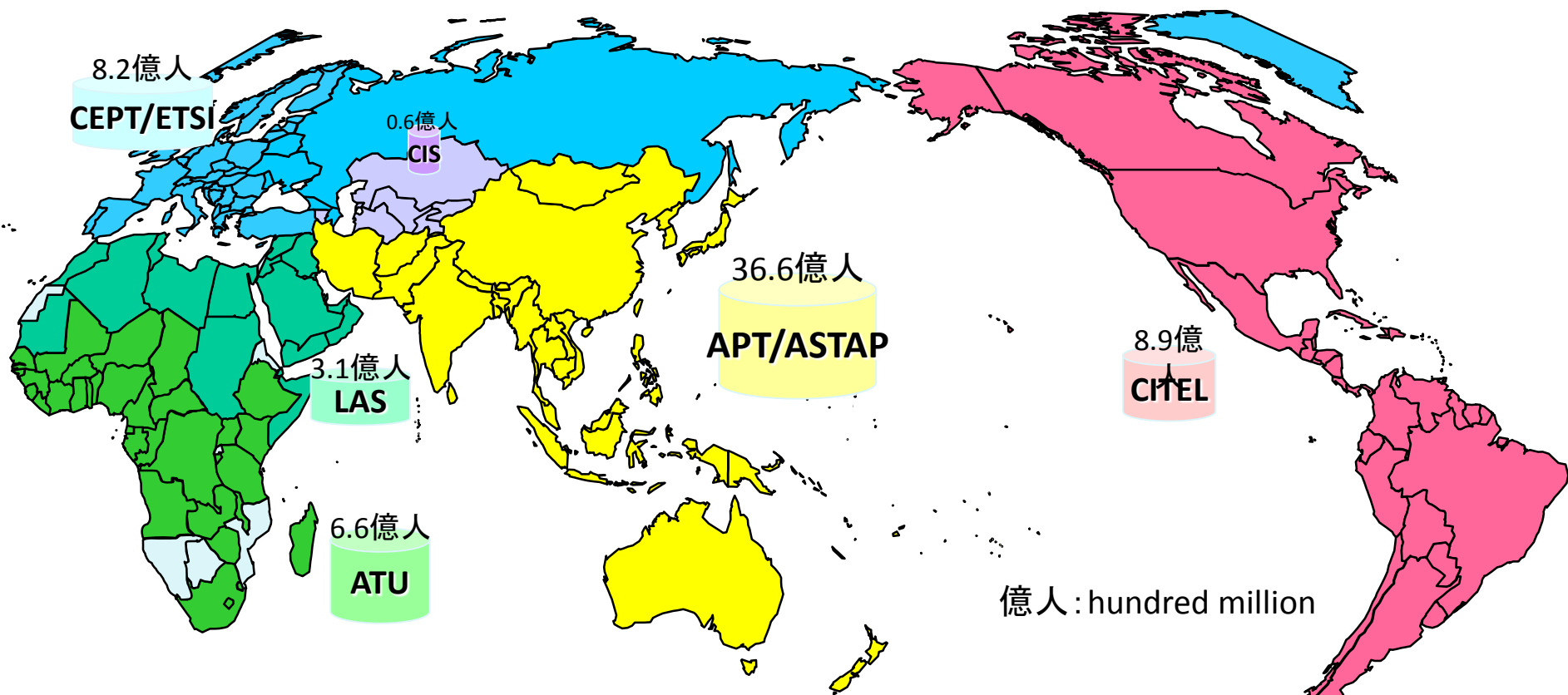
◆ Regional standards

- ETSI (European Telecommunications Standards Institute)
- CITEC (Inter-American Telecommunications Commission)
- ASTAP (Asia-Pacific Telecommunity Standardization Program)
- CEN (Comité Européen de Normalisation)

◆ National Standards

- TTC (Telecommunication Technology Committee)
- ARIB (Association of Radio Industries and Businesses)
- JCTEA (Japan Cable Television Engineering Association)

Regional standards organizations



APT = Asia-Pacific Telecommunity,

ASTAP = APT Standardization Program

CITEL = Inter-American Telecommunications Commission

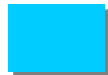


CEPT = European Conference of Postal

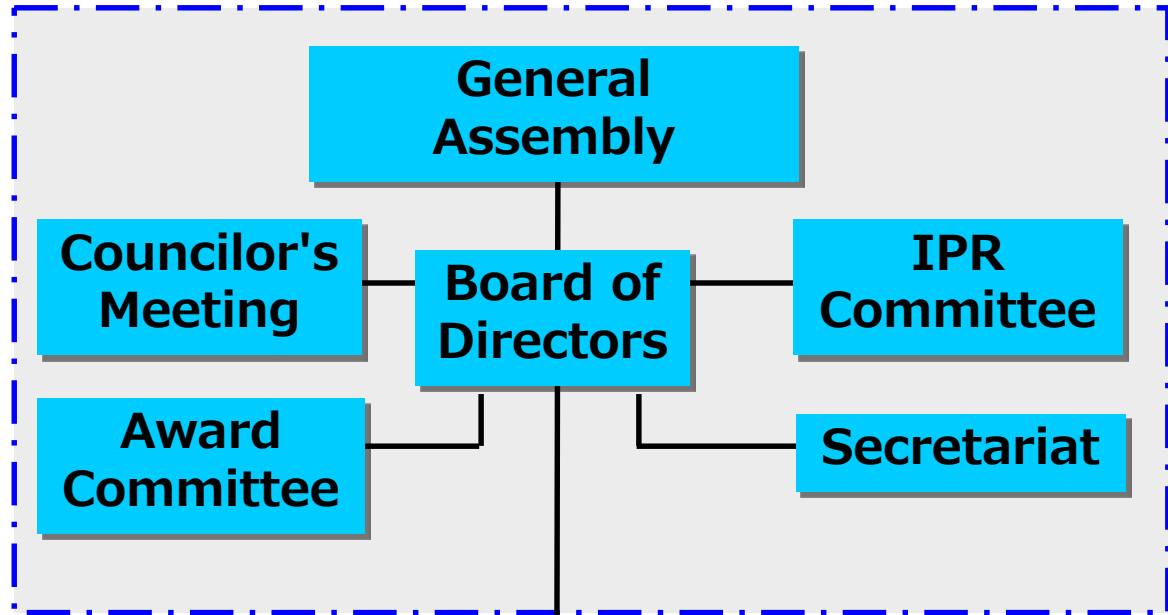
ETSI = European Telecommunications Standards Institute

CIS = Commonwealth of Independent States

ATU = African Telecommunications Union, LAS = League of Arab States

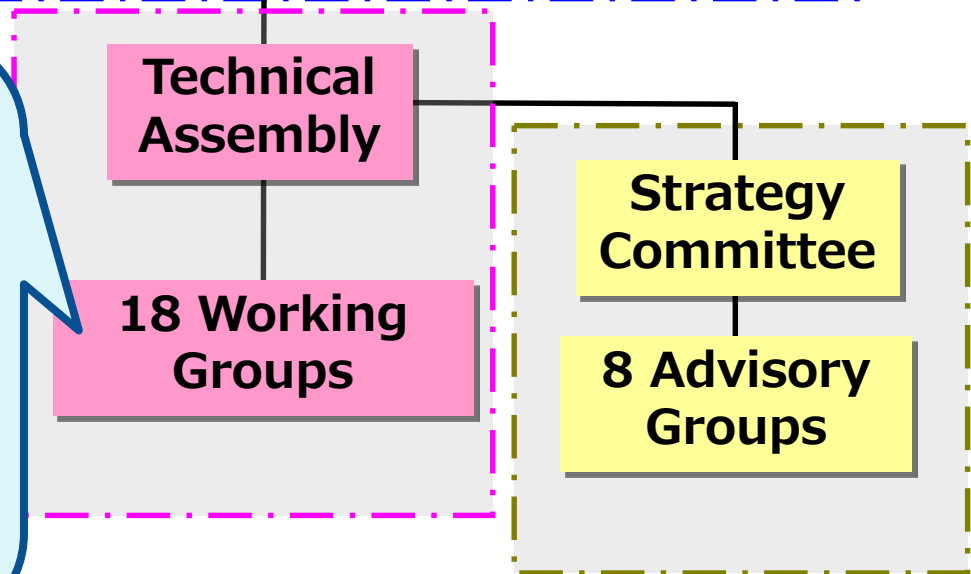
TTC Organization Chart

-  Administrative entities
-  Advisory entities
-  Stds-development entities



Hot issues

**M2M/IoT,
Multimedia applications,
Future mobile networks,
Core/Access/Home-networks,
Security, Media coding,
Climate change,
Signalling, Numbering,
etc.**



TTC Homepage: <http://www.ttc.or.jp/>



一般社団法人情報通信技術委員会

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入会のご案内

標準化手続き

9月12日スタート
第98回標準化会議

現在の標準数累計:835件

会議開催状況

TTC会議開催状況
ITU-T会議開催予定

マエダブログ



一般社団法人情報通信技術委員会(TTC)は
情報通信ネットワークに係る標準を作成することにより、
情報通信分野における標準化に貢献するとともに、その普及を図ります

クールビズ(ノーネクタイ、上着未着用)実施中:5月1日~10月31日

トピックス

一覧へ

- 2014年10月14日 [マエダブログ更新 2014年10月14日号](#)
- 2014年10月10日 [お知らせ マルチメディア応用専門委員会の設立、委員募集](#)
- 2014年10月10日 [第12回e-Healthワーキングパーティ会合開催のご案内](#)
- 2014年10月7日 [第16回スマートカーWPおよび第4回災害時ITS応用SWP会合のお知らせ](#)
- 2014年10月1日 [CEATEC JAPAN 2014への出展のお知らせ](#)
- 2014年10月1日 [マエダブログ更新 2014年10月1日号](#)
- 2014年9月30日 [第168回理事会報告](#)
- 2014年9月29日 [TTC Supreme Lectures & Real Workshop「ソーシャル・ビッグデータ~ビッグデータ時代のICTの役割を考える~」開催報告](#)

セミナー案内

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TTC on standardization education



一般社団法人 情報通信技術委員会

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「標準化」ってなに？

標準化教育ページ



ICT(Information Communication Technology)分野の標準化に関していろいろ知りたい方へ、標準化教育テキストや標準化に関するコラムや映像コンテンツを紹介します。

ラインナップ



Tutorial texts for ICT standardization; 標準化教育テキストの目次: Japanese only

1. 情報通信分野における標準化とは
 - 1-1 標準化の必要性と意義
 - 1-2 国際貿易と標準化
 - 1-3 標準と標準化機関の分類
 - 1-4 標準化とビジネス
2. 標準化機関
 - 2-1 デジタル標準化機関
 - 2-1-1 ITU
 - 2-1-2 ISO
 - 2-1-3 IEC
 - 2-1-4 ISO/IEC JTC1
 - 2-2 フォーラム等の民間標準化機関
 - 2-2-1 IEEE
 - 2-2-2 IETF
 - 2-2-3 3GPP
 - 2-2-4 oneM2M
 - 2-2-5 BBF
 - 2-2-6 MEF
 - 2-3 地域・国内標準化機関
 - 2-3-1 ETSI
 - 2-3-2 ARIB
 - 2-3-3 TTC
3. 標準化機関の相互協力・連携
 - 3-1 標準化機関の相互協力・連携
 - 3-2 標準化機関の比較
4. 標準化と特許
 - 4-1 標準化と特許
 - 4-2 標準化に関する特許問題事例
5. 相互運用性と認証
 - 5-1 相互運用性と認証とは
 - 5-2 ITUでの取組
 - 5-3 日本での取組 HATS
 - 5-4 欧州での取組 ETSI
 - 5-5 フォーラム等の標準化機関での取組
6. 標準化事例
 - 6-1 IPTV
 - 6-2 ホームネットワーク
 - 6-3 光アクセスシステム

To get the PDF file, please access to

http://www.ttc.or.jp/study_std/stdtext_note/

Thank you for your listening.



**For more information,
<http://www.ttc.or.jp/e/>**

**If you have any questions, please contact
to
yoichi.maeda@ttc.or.jp**