

ITS Radio Communications: New Technologies and Deployment Part 1: New Technologies

November 18, 2003 Madrid, Spain ITS World Congress SS-16

Satoshi (Sam) Oyama
Hitachi
DSRC International Task Force
ITS Info-communications Forum, Japan



Contents

- 1. Madrid Special Sessions
- 2. ITS Standards DSRC
- 3. ITU-R
- 4. ISO TC204
- 5. Asia-Pacific
- 6. Japan
- 7. Related Topics
- 8. Conclusion



1. Madrid Special Sessions



Special Session 16: Tuesday, 18 November 2003, 15:00 – 16:30

ITS Radio Communications:

New Technologies and Deployment

Part 1: New Technologies

Moderator, Satoshi (Sam) Oyama, Hitachi, Japan

- Sam Oyama, Hitachi, Japan
- Dick Schnacke, TransCore, U.S.A.
- Knut Evensen, Q-Free, Norway
- Yukiko Habu, KDDI, Japan



Special Session 20: Tuesday, 18 November 2003, 17:00 – 18:30

ITS Radio Communications:

New Technologies and Deployment

Part 2:Emerging Services on DSRC Platform

Moderator, Prof. Takaaki Hasegawa, Saitama Univ., Japan

- Dr. Nam, KOTI, Republic of Korea
- Dick Schnacke, TransCore, U.S.A.
- Guy Fremont, Cofiroute, France
- Kotaro Kato, MLIT, Japan

November 18, 2003 5

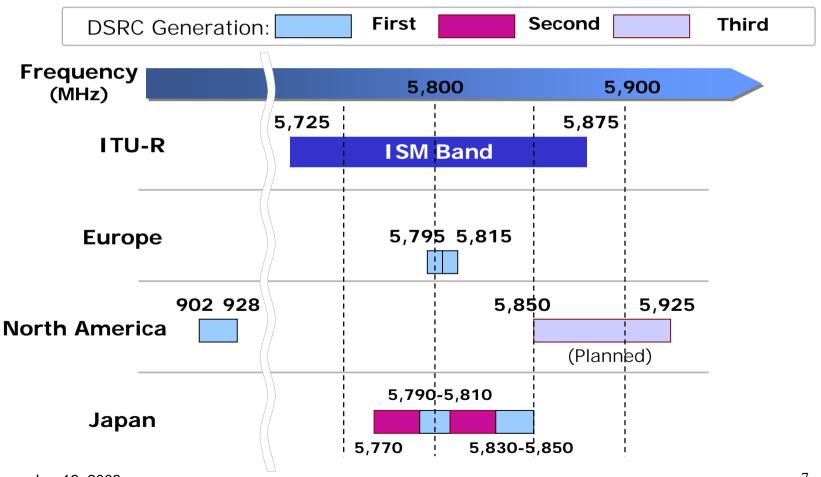


2. ITS Standards - DSRC

DSRC: Dedicated Short Range Communication



DSRC Spectrum Allocations



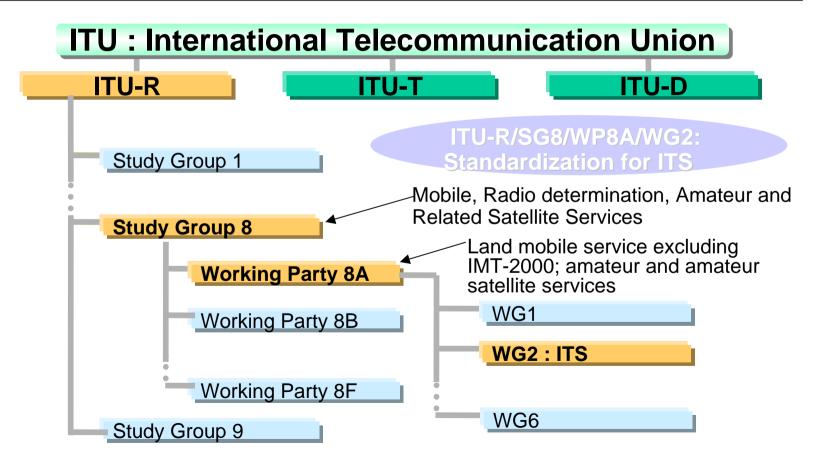


Global ITS Standards - DSRC

Applications				
			ISO	ļ
Layer 7	TC204			
Layer 3 - 6		Liaison		
Layer 2	ITU-R SG8		ISO	
Layer 1	WP8A		TC204	

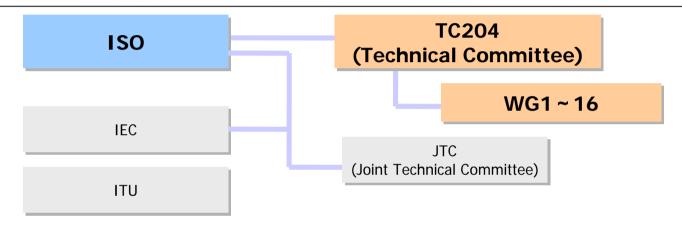


ITU-R SG8 WP8A





ISO TC204



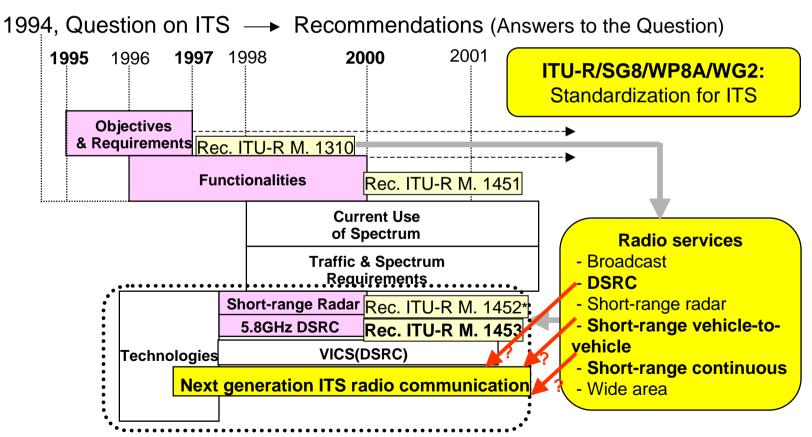
WG	Work Program	Convenor	WG	Work Program	Convenor
WG1	Architecture	U.K.	WG9	Traffic Management	Australia
WG2	-		WG10	Travelers Information	U.K.
WG3	Data Base	Japan	WG11	Navigation	Germany
WG4	AVI/AEI	Norway	WG12	-	-
WG5	EFC	Netherlands	WG13	-	-
WG6	-	-	WG14	Vehicle Control	Japan
WG7	Commercial Freight	Canada	WG15	DSRC	Germany
WG8	Public Transport	U.S.A.	WG16	Wide area comm.	U.S.A.



3. ITU-R



ITU-R Recommendations





4. ISO TC204



WG15

- Convenor: Dr. Rokitansky (Germany)
- Japan, Korea, Australia, USA, Canada, Brazil, France, ...
- •Work Item:

DSRC Layer 7 (Application Layer)

Editor: Nagashima (Hitachi, Japan)

The DIS draft has been approved by five months

ballot in October 2003.

The next stage is FDIS or IS.



WG16

- Convenor: Russel Shields (USA)
- •USA, Canada, UK, Norway, Japan, Korea, ...

•Work Item:

WG16.1: CALM (Communication Air-interface Long and Medium range) 2G/3G, Microwave 5.8/5.9GHz:

M5), Infrared, Millimeter Wave, Network protocol

WG16.2: Network Protocol

WG16.3: Vehicle Probe Data for Wide Area Communication

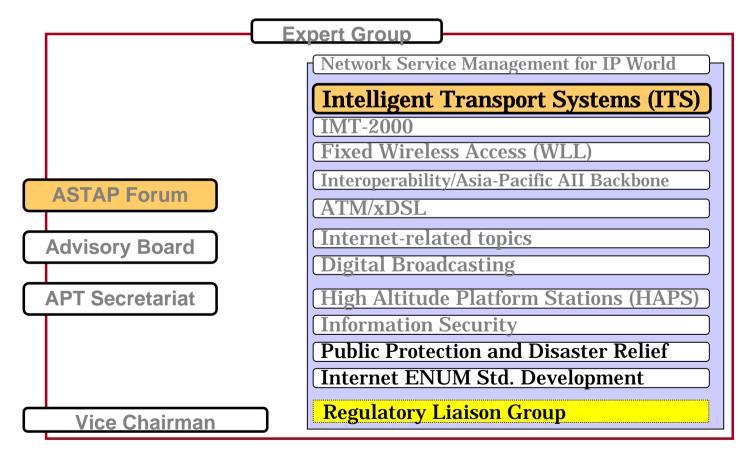
WG16.4: Protocol Management Information



5. Asia-Pacific



Asia-Pacific Telecommunity Standardization Program

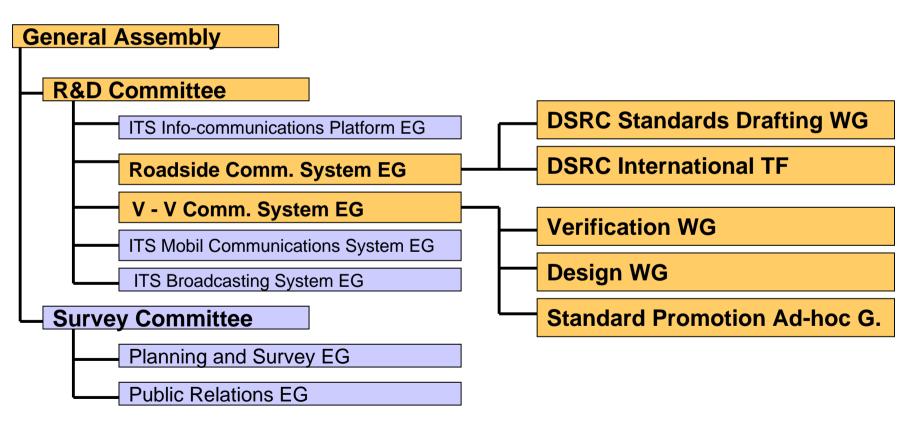




6. Japan

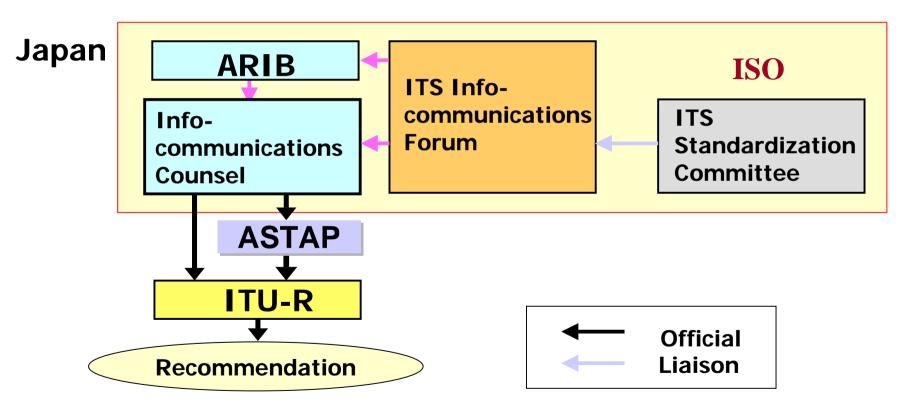


ITS Info-communications Forum





Japan – ASTAP – ITU-R





7. Related Topics



1st International Seminar & Workshop on VSC (Vehicle Safety Communications)

Date: September 3, 4 and 5, 2003

September 3; VSC Seminar

September 4 and 5 (am); VSC Workshop

September 5 (pm); Technical Visit

Venue: ARIB (Association of Radio Industries and Businesses)

Kasumigaseki, Chiyoda-ku, Tokyo, Japan

Attendees:

VSC Seminar: About 230

VSC Workshop: About 50

(U.S.A. 6, Korea 1, France 1, Norway 1)

Organizer: ITS Info-communications Forum, Japan

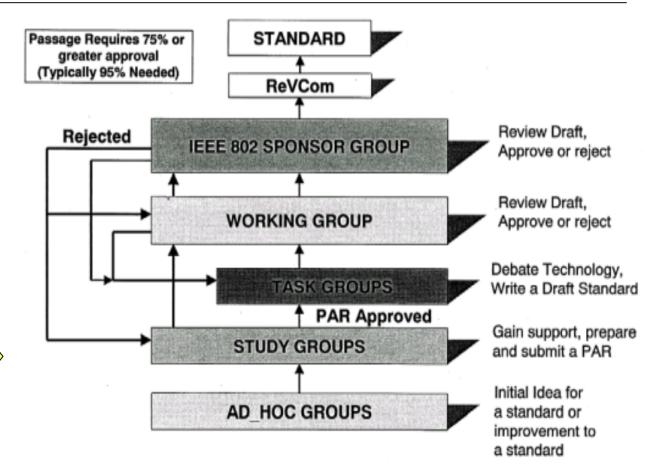


IEEE 802.11: WAVE SG

- July 2003, IEEE 802.11 Plenary Meeting has adopted a proposal to establish a <u>Study Group (SG)</u> based on North American DSRC standard called ASTM E2213-03.
- 2. <u>September 2003 in Singapore, DSRC has been renamed to WAVE</u> (Wireless Access in Vehicular Environment).
- 3. November 2003 in Albuquerque, U.S.A., WAVE SG made discussions on PAR (Project Authorization Request) and 5 Criteria toward establishing a new TG on WAVE. The PAR and the 5 Criteria have been approved by IEEE 802.11 WG, and will be forwarded to IEEE 802 Executive Committee for formal establishment of a TG.
- 4. End of 2004 will be the earliest time frame to complete this transfer process.



IEEE 802: Standardization Process



NOV 2003 SEPT 2003 U JULY 2003

802.11 Meetings

24



8. Conclusion

- Market driven ITS Radiocommunications standardization is important.
- Need to participate for ITU-R, ISO, IEEE and ASTAP, in addition to ARIB and ITS Info-communications Forum, such as in Japan.

November 18, 2003 25



Contact

Satoshi (Sam) Oyama

Hitachi, Ltd.

Tokyo, Japan

E-mail: oyama@tsji.hitachi.co.jp

Phone: +81-3-5295-1367