

TRIP REPORT

ISO/TC 204 PLENARY / C/HOD / WORKING GROUP MEETINGS

June 2-6, 2003

Nagano, Japan

William Johnson
Head of Delegation Canada, and
Chair, SCC/CAC for ISO/TC 204

Introduction

The spring 2003 meetings of ISO Technical Committee 204 (Intelligent Transportation Systems) were held in Nagano, Japan. The venue was moved to Japan at the last moment from the intended host city, Beijing, China, because of international health concerns. For the same reason, the overall meeting attendance was somewhat reduced compared to previous meetings. The official host was Japan Industrial Standards, Department of Economy, Trade and Industry and the meeting organizer was the ISO/TC204 National Committee of Japan, Society of Automotive Engineers of Japan (JSAE).

The ISO/TC 204 meetings were held over 5 days from June 2-6, 2003. Working group meetings were held during the first three days of the week (Work Groups 4, 7.1, 8, 9, 11, 14, and 16 met on Monday to Wednesday). The Strategic Planning Committee met on Wednesday, the Conveners & Heads of Delegations (C/HOD) met on Thursday and the Plenary met on Friday.

This report provides a brief overview of the proceedings of the Plenary meeting and a summary of the progress reported by Work Group conveners at the Conveners & Heads of Delegation meeting. Summary reports of selected Work Group meetings (those attended by Canadian delegates) are included as appendices. The names of Canadians are highlighted to draw attention to those agenda items to which Canada contributed. For further information, contact the delegate concerned.

Canadian Delegation

The Standards Council of Canada (SCC) authorized the members of the Canadian delegation to attend the ISO/TC 204 spring 2003 meetings in Nagano, Japan. The delegation consisted of 2 members: the Head of Delegation (HOD) Dr. William Johnson, Consultant (Transport Canada retired), and Dr. Lewis Sabounghi of Sabounghi & Associates.

Both Canadian delegates attended the C/HOD and Plenary meetings. As the international Convener of Work Group 7 (General Fleet Management & Commercial Freight), Dr. Sabounghi was responsible for presenting a report to the C/HOD meeting on the progress of Work Group 7 since the last Plenary in Chicago in October 2002. Work Group 7 did not meet in Nagano due to restrictions on international travel as a result of international health concerns (Work Group 7.2 did meet later in June in Ottawa, Canada). Instead, Dr. Sabounghi organized and convened a special consultation meeting with the members of the Japanese Shadow Committee for Work Group 7.1 (Tracking and Monitoring of Hazardous Materials/Dangerous Goods) at Nagano. The purpose was to discuss their comments on ISO/CD 17687. He also attended the meetings of Work Groups 4 and 16 as the expert member from Canada. Dr. Johnson attended the special meeting of Work Group 7.1 to act as the rapporteur. He also attended the Work Group 9 meeting as an observer from Canada and a workshop convened by Work Group 16. Notes on these meetings are appended to this report.

Summary & Future Hosting

The 21st Plenary meeting of ISO/TC 204 included over 40 delegates from 10 countries (12 were absent, 5 with apologies). In attendance were 10 Work Group conveners (out of 13) and liaison representatives from ISO headquarters in Geneva, the TC 204 secretariat in the USA (SAE to June 2003 and ITS America from June 2003), ISO/TC 22, ISO/IEC Joint Technical Committee 1 and IEEE. The Plenary concluded a full week of working meetings and consultations by passing 28 resolutions for follow up action. Despite the current difficulties facing international travel, Technical Committee 204 continues to thrive after 10 years of operation.

Canada announced it would host the ISO/TC 204 meetings in the spring of 2004 in Vancouver, BC. The meeting dates are fixed as May 17-21, 2004. Every third meeting, the ISO/TC 204 meets in North America. As there are only two member countries in NA, it is Canada's turn to host the next meeting. Canada has acted as host on 2 previous occasions, once in Toronto (spring 1998) and once in Montreal (autumn 1999). The Chair of the SCC/Canadian Advisory Committee for ISO/TC 204, will head the committee to organize and plan the hosting activity. **Dr. Johnson** will work in collaboration with major supporters of ISO/TC 204 in Canada and the U.S. to plan and organize the hosting arrangements.

Report of Plenary Meeting

The Plenary meeting is the focal point of the standards development business of ISO/TC 204. The agenda includes a review of previous minutes and progress to implement previous resolutions, report from the secretariat, reports from Work Group conveners as delivered the day before, liaison reports from other organizations involved in ITS standards development, report from the ad hoc Strategic Planning Committee, plans for future meetings and, finally, new resolutions for action arising from Work Group and plenary recommendations.

Secretariat Report

It was confirmed that the SAE will relinquish the role of TC 204 secretariat effective with the meeting in Nagano and that U.S./ANSI has reassigned the role to ITS America. ITS America has assigned Paul Nagarian and Regina Barnet to this function and the e-mail address to contact the new ISO/TC 204 secretariat is: TC204secretariat@itsa.org.

Work Group Convener Reports

(See next section below for summary.)

Liaison Reports

TC 204 maintains liaison with many organizations engaged in ITS related standards development activities. This is done to minimize duplication of standards development activities and maximize opportunities for collaboration. The following is a list of these liaisons and the current issues under each one:

ISO/TC 22 – Road Vehicles (this is the oldest continuously functioning ISO committee dealing with human factors and in-vehicle systems, both of which are of key interest to TC204 WG 14); a report from the liaison official proposed setting up joint work groups between ISO/TC 22 and ISO/TC 204 WG 14; this was accepted and will be implemented as joint meetings in Vienna in autumn 2003; conveners were asked to recommend experts for the first round of meetings and countries were asked to recommend new experts.

ISO/TC 104 – containers and tags for cargo seals; no report submitted.

ISO/TC 211 – location-based services for mobile maps; no report submitted.

ISO/IEC JTC1 – information technology; no current issues reported by ISO liaison.

ISO/IEC SC31 – automatic identification & data capture (deals with giving things “names”); the issue here is the wish by some members of ISO/TC204 WG 4 to initiate a new hybrid

standard for radio frequency identifiers that would operate at 2 frequency levels; this is technically difficult with current technology and at a low cost.

ITU Work Party 8A – land mobile communications (spectrum management); it was reported that **Canada** (i.e. Industry Canada, Spectrum Management) has proposed an agenda item for the World Radio Congress (WRC) 2007 to make the 5.85-5.925 GHz band a worldwide ITU standard for ITS; the U.S. has indicated its (tentative) support; the implication of acceptance at the WRC 2003 is that all other development in this band (other than ITS) must stop until the issue is resolved.

ITU Work Party 6M – multi-media broadcast communications (liaises with WG 10); no report submitted.

APEC TWG/ITS SIG – promotes ISO/TC 204 in Asia-Pacific; initial planning for a “Secure Trade using ITS” intermodal demonstration is underway to automate critical data security; the workshop in Chicago in conjunction with the previous TC 204 meeting was deemed a success and may be repeated in Vancouver (spring 2004), Nagoya (11th World Congress) and Beijing (autumn 2004).

IEEE – U.S. based Standards Development Organization; IEEE has agreed to adopt the ISO 14817 data documentation standard for its data registry activities; (note - this opens the way for IEEE to become the ISO repository for ITS data descriptions); IEEE is working closely with WG 16 and ASTM on DSRC upper layers; IEEE will propose a new work item for WG 2 on “framework for security in ITS”.

Open GIS Consortium – develops geographic information system standards; no report submitted.

CEN – European Standards Council; Vienna Agreement authorizes ISO-CEN cooperation and joint balloting of standards; no report submitted.

Strategic Planning Committee Report

The ad hoc Strategic Planning Committee report updated members on the status of 2 items.

1) The MOU for freight movement within supply chains. This item is germane to the development of the work item under Work Group 7.2 on cargo identification for intermodal freight. Not all partner TCs have yet signed the MOU (TCs 8 and 9 have abstained). The next step is for the Chair of TC204 to convene a meeting of the MOU principal members.

2) The discussions with TC 22 to set up joint work groups. Four joint committees are recommended as follows:

- a) Human machine interface,
- b) In-vehicle telematics,
- c) Cooperative vehicle-highway safety and control, and
- d) Wide-area communications to-from and between vehicles.

A joint coordinating group will be formed consisting of the 2 TC chairs. Conveners are invited to nominate experts to the joint committees who will be invited to attend the proposed joint meetings in Stockholm and Vienna. Countries are also invited to name new experts to be members of the joint committees.

Future Meetings

The schedule for the next ISO/TC 204 meetings is as follows:

- Vienna, Austria - October 14-17 2003
- Vancouver, Canada – May 17-21, 2004
- China – autumn 2004

Resolutions

The 28 resolutions passed by the delegates at the plenary will be posted on the SAE (and ITSA) and SCC websites. Resolutions of prime interest to Canada include:

- Freight MOU will include coordination with UN/EDIFACT (affects WG 7.2).
- Countries are requested to recommend experts for WG 14 (vehicle-roadway).
- Joint cooperation between TC 22 and TC 204 was approved.
- Extend life of ISO/PWI 15784 concerning centre-to-roadside communications (this is a WG 9 work item that Canada may wish to participate in).
- Letter ballot will be circulated to approve a work item for “electronic licence plate”.
- Chair to take action to resolve boundary issues with TC 211 (mobile maps and geomatics).
- New procedure to replace conveners who resign was approved (will now be open to all countries to propose candidates and TC 204 will select).
- Call for nominations for convener of WG 11 (route guidance and navigation systems).

Report of C/HOD Meeting

This meeting consisted of reports of recent progress by each Work Group convener. These reports are briefly summarized in this section.

- WG 1 Architecture – Bob Williams (UK) – ISO 14817 Data Dictionary (attribute definitions) is ready for field application; countries are invited to try and give feedback; Australia and New Zealand are setting up a joint registry using this standard.
- WG 2 Security Technology – Rick Weiland (US) – conducted a survey of members but the response indicates interest if work items arise (none proposed at this time); TC 8 is dabbling in this area and WGs 2 and 7 should take note.
- WG 3 Mobile Map Data – Masao Shibata (JP) – active work items are ISO/NP 14825 (GDF – geographic data files), ISO/NP 17572 (location reference methods), ISO/PWI 22953 (XGDF); extensive liaison exists with other WGs, JTF, OGC, SC1, TC211; issues are due to expanding and changing nature of market conditions; issue is need to harmonize activities with TC 211.
- WG 4 Automatic Vehicle ID – Knut Evenson (Norway) – this work group has completed 7 standards or specifications; work was done jointly with CEN under Vienna agreement; a new work item is proposed to develop a standard for basic electronic registration devices (ERDs) via a parallel ballot with CEN.
Note: Contact **Dr. Sabounghi (CA)** for further information on WG 4.
- WG 5 Fee and Toll Collection – (Convener Henk Stoelhorst (Netherlands) absent, report delivered via SAE secretariat Richard Cox) – the work items are developed in parallel between CEN/TC 278 and ISO/TC 204.
- (WG 6 amalgamated with WG 7)
- WG 7 Fleet Management and Freight – **Lewis Sabounghi (CA)** – there are 2 work items; ISO/NP 17687 (track and monitor hazmat/DG) was circulated for comments and these are now being addressed; ISO/PWI 24533 (intermodal freight transfer and tracking) was approved in a ballot and is now undergoing extensive external consultations (e.g. Ottawa in June) with a focus on surface mode interfaces with other modes starting with air-truck interfaces.
- WG 8 Public Transport and Emergency – (Convener Alan Kiepper (US) absent, report delivered by Mr. Flood and Prof. Nakamura) – ISO/CD 17686 (TCIP) is out for comments due on July 7; this is a key standard for ITS in public transport and U.S. sponsors wish to harmonize this item with Transmodel (European approach); there work items for transit stop numbers, vehicle area network (based on SAE J2496) and a proposed new preliminary work item for smart card applications.

Note: No Canadian delegate attended this Work Group meeting due to schedule conflicts. Contact Dr. Johnson (CA) for further information.

- WG 9 Integrated Transport Information, Management & Control – David Clowes (UK) – ISO/DIS 14827 (centre-to-centre) only needs reformatting before submission to ballot for final international standard; Japan has proposed a new “style” for the dormant work item ISO/AWI 15784 (centre-to-roadside) and proposes to renew the mandate for this item; SWG 9.1 cooperates with CEN/TC278/WG8 on data dictionary issues; Japan is developing a data dictionary for WG 9 elements using ISO 14817; a work item on data quality ISO/PWI 21707 will be circulated to conveners for comment after WG 9 review; the Work Group conducted a brainstorming session to review the need for ISO standards in general and came up with 5 reasons (i) avoid duplication, (ii) enable interoperability between countries, (iii) assist regulators, (iv) promote manufacturing economies, (v) develop competitive markets (note that specific cases will involve 1 to 5 reasons).
Note: Contact **Dr. Johnson (CA)** observer) for further information on WG 9.
- WG 10 Traveller Information Systems – Paul Burton (UK) – the standards completed and work items in this Work Group are developed in parallel with CEN; ISO 14819, ISO 14821, ISO 14822, ISO 14823 are for TTI messages respectively via radio data coding, cellular systems, DSRC beacons, and stationary devices; ISO 24530 is a new work item for hi-data rate digital bearers (note that **Jackson Wang (CA)** is contributing to the definition of generic user service profiles).
- WG 11 Route Guidance and Navigation – (Convener resigned in early 2003, report was delivered by Mr. Nakajima (JP) – there are no active participants in this Work Group from Europe or North America and therefore it was recommended that no new work items be started on route guidance and that work continue on other existing work items (i.e. architecture and message sets); proposed new work items under the new rules for approving PWIs will require only 3 countries to get underway (not 5); TC 204 must recruit a new convener for WG 11.
- WG 14 Vehicle/Roadway Warning and Control – Kiichi Yamada (JP new) – this Work Group attracts a large number of delegates who share an interest in advanced automotive applications of ITS technologies such as SOWS, ERBA, ICAAS, MALSO, LDWS, etc.; a major issue is the evolving overlap with the mandate of TC 22 and its numerous WGs (both are competing for the same small pool of experts); it was announced that **Peter Burns (CA)** of Transport Canada is a newly accredited expert to WG 14; this was welcomed because the WG badly needs human factors expertise.
- WG 15 DSRC – (Convener Carl-Hebert Rokitansky (Germany) absent, no report submitted). (Note that the DSRC application layer standard is ready to go to TC 204 member countries for balloting as a draft international standard i.e. DIS).
Note: Contact **Dr. Sabounghi (CA)** for further information on WG 15.
- WG 16 Wide Area Communications – Russell Shields (US) - This Work Group has several sub-groups to address and harmonize various forms of wireless communications; the Work Group is engaged in an intensive round of meetings and negotiations to arrive at agreements on international standards (e.g. WG 16 met in Montreal May 12-16 hosted by **Dr. Sabounghi (CA)** expert) and TC/TDC; there are 3 sub Work Groups in WG 16: (i) CALM communications including radio frequency 5.85-5.925 GHz band, cellular, infrared and microwave; (ii) developing the networking harmonization functions; (iii) probe data definitions; the first work item for ballot as a standard is ISO 15662 (message protocol structure and header) due in July; WG 16 uses existing protocols such as the IEEE standard protocol 802.11 and the standards development process is focussed on architecture, data structures and message sets.

Canada's primary interest is in WG 16 is in DSRC medium-long range 5.85-5.925 GHz radio frequency band for vehicle-to-roadside and vehicle-to-vehicle communications.
Note: Contact Dr. Sabounghi for further information on WG 16.

For further information, contact the Head of Delegation:

William F. Johnson Sc.D. (M.I.T.)
Transport Research, Education & Development Services
(613) 797-1489 (phone) 820-1831 (fax)
johnswf@attglobal.net
58-280 McClellan Rd.
Ottawa, Ontario K2H 8P8 Canada

Or, the International Convener of Work Group 7:

R. Lewis Sabounghi, Ph.D.
Sabounghi & Associates
(613) 347-7345 (phone) (800) 474-6066 (fax)
lewis@sabounghi.com
6257 Karen Dr.
Bainsville, Ontario K0C 1E0 Canada

Appendices

Please contact William Johnson to obtain copies:

A – Meeting Report ISO/TC 204 Work Group 7.1 – Consultation with Japan June 4, 2003

B – Meeting Report ISO/TC 204 Work Group 9 – June 2-4, 2003

C – Workshop Report ISO/TC 204 Work Group 11 and 16 – June 4, 2003