Final Report

Advisory Council on Rail Safety
Working Group on
Locomotive Voice and Video Recorders

For immediate release
June 7, 2013

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Introduction

Following a VIA rail train derailment in Burlington, Ontario on February 26, 2012, the Minister of Transport, Infrastructure and Communities (the Minister) referred the issue of Locomotive Voice Recorders (LVRs) to the Advisory Council on Rail Safety (ACRS) for consideration.

Subsequently, the ACRS Chair, the Assistant Deputy Minister, Safety and Security, tasked the Director General, Rail Safety with leading a working group to explore the concerns expressed by the Transportation Safety Board (TSB) with respect to the absence of communication recording devices in the locomotive cab involved in the Burlington derailment.

The mandate of the Working Group[1] was to explore options that the Minister could consider to address the TSB's concerns. Therefore, under the auspices of ACRS, a LVR Working Group was established with representatives of the railways, the Railway Association of Canada (RAC), unions and Transport Canada (TC), to study the issue, report on its progress to ACRS and provide the Minister with options, and recommendations in a written report by December 31, 2012.

With the premise that information obtained from communications recorded in locomotive cabs could assist the TSB during accident investigations, the role of the Rail Safety Directorate was to facilitate discussions between rail industry representatives and employee representatives in order to reach, if possible, a solution that would be acceptable to all.

In preparation for the first Working Group meeting, Transport Canada held individual meetings with:

- Industry (RAC, CN, CP and VIA) on March 5, 2012;
- Unions (Teamsters, United Steel Worker, International Brotherhood of Electrical Workers, Canadian Auto Workers, Canadian Labour Congress) on March 26, 2012 ;
- TSB to discuss legal parameters on May 3, 2012;
- The U.S. Federal Railroad Administration (FRA) on June 4, 2012; and
- Teamsters Canada Rail Conference - Maintenance of Way on June 12, 2012.

While the Minister assigned the Working Group with examining the issue of locomotive voice recorders, in light of the recommendation of the June 14, 2012

[1] The Working Group Terms of Reference and membership are found in Appendix A

revised TSB Watchlist[2], which highlighted the lack of requirement for on-board video and voice recorders on locomotives, the members agreed to extend the Working Group's mandate to include inward (instrument/crew) and outward facing video in their study.

At the outset members agreed that the preferred approach would be a voluntary one and members would ultimately work towards consensus.

The Working Group considered the following:

- Uses/Safety benefits
- Legal/Privacy issues
- Accident/Investigation Statistics
- Cost/Benefit Analysis
- Other modes
- Practices in other countries
- Technological issues
- Voluntary/Regulatory Approaches
- Other possible actions

In summary, the Working Group examined the following options:

- railway companies voluntarily installing of voice/video recording devices;
- development of a new regulation;
- Section 20 of the *Railway Safety Act* whereby industry voluntarily submits amendment to the existing Locomotive Inspection and Safety Rules and development of guidelines; and
- Section 19 of the *Railway Safety Act* whereby the Minister orders industry to amend the rules.

The Working Group is proposing an approach that is supported by all members and is also offering other options for which consensus was not reached amongst team members but that the Minister could consider.

[2] TSB News release March 1, 2012: *Derailment of VIA Rail Canada Train 92 Investigation Update and Renewed Call for Voice Recorders on Canadian Trains*
TSB News release June 14, 2012: *There is no requirement for on-board video and voice recorders on locomotives*. The rail industry should ensure that communications in locomotive cabs are recorded.

Background: Previous Working Groups

Since 2003, when the TSB first issued a recommendation with respect to communication recording devices in locomotive cabs, Transport Canada has established two previous working groups – in 2006 and 2009 respectively – to study the feasibility of including this technology within the confines of locomotive cabs.

2006 Working Group

In July 2003 the Transportation Safety Board (TSB) released final report R99T0017 regarding the results of its investigation into an incident that occurred on January 19, 1999 in Trenton, Ontario.

The TSB issued one rail safety recommendation (R03-02):

> "*The Department of Transport, in conjunction with the railway industry, establish comprehensive national standards for locomotive data recorders that include a requirement for an on-board cab voice recording interfaced with on-board communications systems.*"

In 2006, in response to recommendations made by both the Transportation Safety Board of Canada (TSB) and the National Transportation Safety Board (NTSB)[3] of the United States (U.S.), Transport Canada-Rail Safety established a Working Group that included members from the Federal Railroad Administration (FRA), TC Civil Aviation, TC Rail Safety, the rail industry and unions to consider locomotive voice recorders.

The Working Group determined that the rationale for the implementation of voice data recorders on aircraft, i.e. given lower survivability rates in air accidents, did not generally apply in the rail mode.

Following a review of the issue in the U.S., the Federal Railroad Administration (FRA) concluded that it would not proceed with making voice recorders a regulatory requirement.

The FRA and Transport Canada took action to require the hardening of event recorders to improve survivability as well as increasing the safety data collected.

[3] NTSB R-97-009, recommendation of August 28, 1997 to require the recording of train crewmembers' voice communications for exclusive use in accident investigations and with appropriate limitations on the public release of such recordings.

The Working Group concluded that locomotive voice recorders were an investigative tool rather than a safety issue.

2009 *Railway Safety Act* Working Group on Proximity/Operations

In November 2007, the Panel appointed to review the *Railway Safety Act* made the following recommendation (#44):

> *Transport Canada should require the application of voice recorders on all new and existing locomotives, with survivability provisions similar to those for locomotive event recorders.*[4]

In 2009, the *Railway Safety Act* Working Group on Proximity/Operations was established to address recommendation #44. The Working Group, comprised of industry, union and Transport Canada representatives, discussed at length the possibility of legal or Charter issues depending on volunteer or regulatory programs. The unions expressed concerns and opposition to locomotive voice recorders, if used for compliance monitoring by the railways.

In August 2009, following discussions between Rail Safety's Director, Regulatory Affairs and the Associate Administrator for Railroad Safety/Chief Safety Officer for the Federal Railroad Administration (FRA), the Working Group learned that the FRA was not proceeding with the possible inclusion of voice recorders on new and existing locomotives[5].

The Working Group presented its final report to the *Railway Safety Act* (RSA) Review Steering Committee[6] on December 14, 2011, and recommended, and the Steering Committee concurred, to not pursue the issue due to:

- regulatory harmonization initiatives with the U.S. to facilitate cross-border rail transportation,
- lack of safety benefits, and
- possible privacy or Charter issues.

[4] Stronger Ties: A Shared Commitment to Railway Safety, Review of the *Railway Safety Act,* November 2007, Chapter 9: Operational Issues, page 160

[5] National Transportation Safety Board recommendation to the FRA, R-07-3, Railroad Accident report NTSB/RAR-07/01, 2007 Collision of two CN Freight Trains, Anding, Mississippi July 10, 2005

[6] The *Railway Safety Act* Review Steering Committee, a joint Transport Canada-industry-union committee tasked by the Minister of Transport in March 2007 to develop an action plan to address the recommendations of the RSA Review.

2012 ACRS Working Group - Observations

Initial observations

In keeping with Treasury Board Secretariat (TBS) guidelines, the Working Group examined various approaches including exploring alternatives to regulation[7]. During discussions, Transport Canada representatives stressed that reaching consensus and endorsing a voluntary approach was the preferred option. TC also highlighted that for the department[8], two issues were untenable: the status quo and any notion of disciplinary action against employees.

Industry's position

Industry and RAC representatives pointed out that to install voice and video recorders to be used only by the TSB for the one or two accidents that the TSB may investigate on a yearly basis, would provide very little, if any, safety benefit.

In addition, to have a positive effect on safety, industry wants access to use the recordings for compliance monitoring. Industry also stressed that from its perspective installing voice recorders without including video would have limited benefits and would not be cost effective.

It was noted that for shortlines the costs for installing devices would be prohibitive. With respect to Urban Transit Authorities (UTAs), it was noted that GO Transit is in the process of testing microphones in locomotive cabs in order to determine feasibility and cost effectiveness. For the other UTAs, at this time, neither AMT nor West Coast Express are considering installing voice or video recordings devices in their locomotive cabs. It was also noted that as their operating crews are employees of CN, CP and Bombardier agreements would be required in order to consider the devices. Furthermore, being publically funded, the UTAs would be hard-pressed to obtain the financial resources required to install any type of recording devices on-board their locomotives.

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[7] Departments and agencies are responsible for assessing the effectiveness and appropriateness of regulatory and non-regulatory instruments for achieving policy objectives. Assessing, Selecting, and Implementing Instruments for Government Action, Treasury Board Secretariat, Introduction, pages 1-2

[8] This is in keeping with the principles of Safety Management Systems (safety culture), and in particular recent provisions of the *Railway Safety Act* with respect to non-punitive reporting.

VIA Rail committed, on a voluntary basis, to test and install voice recording on its locomotives by adding cab microphones to the existing outward facing video recording system. As of October 25, 2012, testing was ongoing and VIA did not have a final solution. VIA and unions have agreed to work together to develop a protocol for the use of the information.[9]

Unions' position

With respect to uses, the unions endorse TSB investigative use and access only. They would like rail companies to agree to the practice of "scrubbing" or deleting recordings in instances where there are uneventful trips. The unions would not support any option that could lead to disciplinary action. In addition, union representatives pointed out that the use of recordings for any disciplinary action would also be subject to labour arbitration and once a decision was made would be made public therefore undermining any concept of privileged information.

Other observations

The Working Group members also discussed the use of recordings beyond main line operations, such as for yard and shop operations. The railways expressed the intent to include yard operations for safety monitoring. VIA did not foresee using voice recordings for shop operations but would for yard movements as required. The union representatives opposed the idea, citing that this went far beyond the scope and intent of the TSB recommendations.

[9] This would be dependent on clarification of Section 28 of the *Canadian Transportation Accident Investigation Safety Board Act* (CTAISB Act). Please refer to the section on Legal/Privacy Issues on pages 10-11.

Working Group Considerations

In conducting its examination of LVRs and inward (crew) facing video[10], the Working Group members examined the following issues:

- Uses/Safety Benefits
- Legal/Privacy Issues
- Accident/Investigation Statistics
- Cost/Benefit Analysis
- Other modes
- Practices in other countries
- Technological issues
- Voluntary/Regulatory Approaches
- Other possible actions

Uses/Safety Benefits

Very early in its deliberations the Working Group contemplated the possible uses and benefits of installing locomotive voice recorders (and video recorders).

The Working Group concluded that under the current scenario and (with TSB only access to the information) there was minimal, if any, safety benefit. Members also agreed that this provided an after-the-fact investigative tool rather than a proactive or preventative safety instrument.

Legal/Privacy Issues

The Working Group members also had to contend with opposing opinions and interpretations with respect to the scope and applicability of the *Canadian Transportation Accident Investigation Safety Board Act* (CTAISB Act).

The Working Group members agreed that the lack of clarity with respect to the applicability and scope of the CTAISB Act is problematic and probably open to legal challenge.

[10] The Working Group members discussed both inward-facing video on crew and inward-facing video on the instrument panel. There was no consensus on this issue, industry favouring video on crew and unions opposing. The Working Group also considered outward facing video, there was agreement that this did not have a huge safety benefit. However, it did serve as a "silent witness" for railway companies especially in crossings accidents. The primary benefit would be to reduce companies' liability.

While solving the issue of CTAISB scope and applicability was beyond the mandate of the Working Group, members unanimously agreed that this issue needed to be resolved as it would affect any option that the Working Group recommended.

Accident/Investigation Statistics

While the impetus for the Working Group was the recent VIA Burlington accident which received much attention, the Working Group took into account the following accident and investigation statistics.

Since 1991, there have been over 600 rail investigations[11] conducted by the TSB. As of October 2012, in only five of these investigations did the TSB make reference to LVRs, which represents approximately less than one per cent of all investigations[12].

Of the five investigations noted, three involved VIA Rail passenger trains.

To note, an additional accident is still under investigation by the TSB – this is the Burlington accident, which prompted the establishment of the Working Group where the TSB has indicated that LVRs would have been helpful for their ongoing investigation.

Given this information, the Working Group members agreed that the number of accidents and rate of investigation do not support the need for this LVR and video technology if used solely for post-incident investigation.

Cost/Benefit Analysis

Given industry's concerns with respect to costs and their ability to use recordings, and that industry supports the installation of voice and video recorders only if railway companies had access to the information for compliance monitoring, the Working Group requested that industry provide a cost/benefit analysis.

CN and CP conducted a cost/benefit analysis on installing inward facing cameras and voice recorders considering the following three scenarios:

[11] The number of investigations does not represent all reportable/reported occurrences (accidents and incidents). Not all occurrences are investigated. The TSB determines which occurrences warrant an investigation.
[12] Appendix B lists occurrences, compiled by Transport Canada, investigated by TSB relating to LVRs.

- TSB investigative use only
- Railway use for post accident/incident
- Railway compliance monitoring and investigation

As industry estimated the cost of installation to be $10,000 per locomotive[13], equipping the entire CN/CP fleet of high horsepower locomotives would cost approximately $22 Million. Maintenance costs per year were estimated to be $250 - $500 per year per locomotive[14].

Benefits were assumed to be associated with a reduction in violations and ultimately in accidents or incidents involving freight road power in which crew inattention may have played a role.

Based on historical data for the past five years[15], an average of 146 such occurrences have taken place each year[16]. The cost of such occurrences (damage and injury) was estimated to be approx $6M per year[17]. Analysis also showed that TSB had investigated only seven of these occurrences over five years, which represents an average of 1.4 per year=1% of occurrences[18].

The analysis estimated that the following benefits could be obtained for each of the three scenarios.

1. Limited to TSB investigation with no ability for railways to use for compliance monitoring or discipline purposes. Would be used in only 1.4 occurrences per year.
   [19]Estimated effectiveness = 3%.
   Benefit would be $180K per year. Payback in 122 years.

[13] CN and CP independently checked with suppliers. The information provided by Wabtec and Railhead Corporation was consistent and in the order of $10,000 installed.
[14] Maintenance costs were estimated based on minor testing and replacement of failed components.
[15] CN and CP accident data for 2007-2012
[16] This includes accidents or incidents involving road locomotives in which crew inattention may have played a role. This also includes certain cardinal rule violations and derailments/collisions. The 146 occurrences is the average per year based on the review of 5.7 years of data (i.e. going back to Jan 1, 2007)
[17] Average damage and injury cost per year associated with the 146 occurrences/ year. Damage would be based on the costs that both railways keep for FRA reporting comparison purposes. Injury costs were based on Human Resources and Skills Development Canada (HRSDC) costs for minor and lost time injuries.
[18] This represents 1.4 investigations per year divided by 146 occurrences per year
[19] Rate of effectiveness are educated estimates based on industry's view of how often crew inattention is likely to be a factor, the chance of being observed/discovered and whether the scenario includes the ability for the railway to use the information for disciplinary purposes.

2. Used by railway but only for post accident/incident. Would be used in 146 occurrences per year.
   Estimated effectiveness = 15%.
   Benefit would be $900K per year. Payback in 24.5 years.

3. Used by railway as part of safety and compliance monitoring. Would be used on daily basis.
   Estimated effectiveness = 33%.
   Benefit would be $2M per year. Payback in 11 years.

Therefore, for CN and CP, only the latter scenario (use by railways as part of safety and compliance monitoring) could justify the cost of installations.

VIA has estimated that the cost to implement voice recording on its fleet is approximately $300,000[20]. VIA noted that this cost could change depending on the success of prototype testing and whether additional design adjustments are required.[21]

It should also be noted that, at this time, current available suppliers of the technology can't guarantee crash hardiness (survivability) of voice recorders, which could defeat the purpose of any use. Estimates indicate the costs would increase approximately 20%.[22]

Other modes

In examining the practices of other Transport Canada modes, it was noted that Civil Aviation and Marine Safety initially developed their respective voice recorder regulations to meet international obligations (i.e. under the International Civil Aviation Organization (ICAO) and International Maritime Organization (IMO). For the rail mode there is no overarching international organization that prescribes or recommends obligations and practices. That said, TC Rail Safety and the FRA continue to work together to harmonize rail safety regulatory requirements on a North American basis whenever possible.

[20] VIA noted that its costs are estimated taking into consideration that it will use existing recording system in its locomotives.
[21] The voice will be recorded on the video recorder, not on the event recorder. The event recorder has crash hardened memory, but the video is not crash hardened, the voice and video will not be as crash resistant as the event recorder. The event recorders do not have the memory space to continuously record voice and are not designed for that purpose.
[22] This is a ball park figure provided by the supplier Wabtec. This would also require a lead time of 18 months to develop the crash hardiness. The industry is willing to install systems with or without crashworthiness provided they can use the monitoring and discipline.

It was also noted that the respective operating environments for these modes is very different to rail. In rail, there are numerous stretches of time when there is no requirement to speak in the locomotive cab. For the most part, the communications in the locomotive consists of calling signals and confirming slow orders. For locomotives on main corridors (such as Toronto, Montreal and Vancouver) communications would represent approximately 50% of the trip/travel time). For branch lines and shortlines (such as those operating in the prairies or transporting grain) communications would represent approximately 5% of the trip/travel time.

The Working Group also noted:

- At this time, there is no requirement for on board video (crew facing) in Civil Aviation or Marine Safety,
- In Civil Aviation, following a flight with no incidents recordings are "scrubbed",
- Voice recordings in Civil Aviation and Marine Safety come under the CTAISB Act and therefore the information is privileged. However, as already noted, a recent court ruling has set the legal precedent that information collected during an investigation is not protected once the investigation is complete.
- In Civil Aviation and Marine Safety, voice recordings are not used for compliance monitoring or disciplinary action as this would be a breach of the CTAISB Act (Section 28(7))

Practices in other countries

Europe

Voice/internal video recording systems in drivers cab are not known in Europe. Known surveillance systems include: radio communication recording, recording of the technical subsystems in the locomotives (such as traction, brakes, vigilance device, speed, use of horn), recording of the functioning of the automatic train protection system and external video recording of track side signals.

The concept of voice/video recording in locomotives is not being considered by European countries.

New Zealand and Australia

In New Zealand and Australia there is neither in-cab voice recording systems or in-cab video systems to monitor driver behaviour. There is currently voice recording of train radio system conversations and these are held in the train control centres and not on the locomotive. There are also data log systems that monitor all driver control related activity and speed, these are kept for a period

of 7 days. Additionally on the new trains there is video monitoring for level crossing, trespasser, signal logging and other out of cab issues.

Access of the data log (event recorder) in the locomotive and the train control tape information (RTC recordings) must be done with a union representative present and can be done for random observation or for an actual incident.

The concept of voice/video recording in locomotives is not being considered in either New Zealand or Australia.

United States

On February 23, 2010, the National Transportation Safety Board made a new recommendation [23] to the FRA to require the installation of voice and inward facing cameras in locomotive cabs. They also recommended that the FRA require that rail companies regularly review and use in-cab audit and image recordings (with appropriate limitations on public release), in conjunction with other performance data, to verify that train crew actions are in accordance with rules and procedures that are essential to safety.

The FRA responded that it was not willing to make voice/video recording devices a regulatory requirement.....*the use of voice and image recording for railroad disciplinary purposes would erode morale and offer manifold opportunities for selective enforcement and possible retaliation against employees for reasons having nothing to do with safety. Building a positive safety culture on the Nation's railroads will require that we avoid that kind of corrosive influence.*[24]

While it was noted that the NTSB in the U.S was recommending that railways install voice recorders to monitor employee compliance and the FRA was not moving in this direction, unions representatives of the Working Group noted that this would be going beyond the scope and intent of the TSB recommendations.

As already noted, TC Rail Safety and the FRA continue to work together to harmonize rail safety regulatory requirements on a North American basis whenever possible.

[23] National Transportation Safety Board, R-10-1 and -2 , letter from Deborah A.P. Hersman Chairman to The Honorable Joseph C. Szabo Administrator Federal Railroad Administration February 23, 2010, page 9

[24] Response from Joseph C. Szabo, Administrator, FRA, MC# 2100207, June 1, 2010

Technological issues

Industry representatives noted that the current available supplier(s) of the technology cannot at this time guarantee crash hardiness (survivability) of voice recorders. Estimates indicate the cost would increase approximately 20% and suppliers would require an 18-month lead time for development.

Recommended option

All Working Group members agreed that installing the devices on a voluntary basis is the preferred approach.

By the end of 2013, VIA Rail is committed, on a voluntary basis, to test and install voice recording on its 73 locomotives by adding cab microphones to the existing outward facing video recording system. However, more testing is required to determine optimal solutions with respect to location of microphones and crashworthiness of the recording devices.

The Working Group is also of the opinion that since voice recording was referenced on five occasions in TSB's investigation reports since 1991 and that three of those accidents involved VIA Rail passenger trains, the recommended option may satisfactorily address the TSB concerns.

Furthermore, VIA Rail and the Teamsters Canadian Rail Conference would be open to a collaborative approach whereby voice recordings could be used for monitoring in-cab communications and therefore, provide a valuable safety tool. However, in order to do so, Section 28 of the CTAISB Act must be clarified to accurately determine if on-board recordings can be used beyond the scope of a TSB investigation.

Other possible actions

Regulatory Approach

While it was agreed that adopting a voluntary approach would be the ideal, the Working Group also examined the pros and cons of a regulatory approach.

The Working Group members discussed the implications of a new regulation to mandate voice/video recorders on locomotives. Concerns were raised with respect to the regulation being able to demonstrate and justify the safety need and benefit.

It was agreed among members that it was very unlikely that this option would pass Cabinet scrutiny. However, industry members are of the opinion that if the recordings could be used for compliance purposes, they would support such a regulation.

Amendment to existing rule

The Working Group also explored amending the Locomotive Inspection and Safety Rules. Under this option, three possibilities were examined:

- Section 20 industry voluntarily amends the Rules to require voice/video recording devices on all locomotives
- Amending the Rules to require voice/video recording devices on passenger locomotives only
- Section 19 Minister imposes that the Rules be amended[25]

The railways would only support such an amendment to the Rules if they could use the information for safety and compliance monitoring on a regular basis as they do with event recorders.

For the unions, the appropriate safeguards and protections would need to be incorporated with respect to purpose, access, downloading and information sharing.

The second possibility was considered unwarranted, given that VIA is already willing to voluntarily test and install voice/video recordings.

The representatives of the railways made it clear that they would strongly object if a Section 19 to amend the rules was used rather than the regulatory development process (which would consider costs and safety benefits).

Ultimately, it was agreed that amending the existing rule was fraught with similar issues and developing a regulation would not be optimal.

[25] Under Section 19 (1) of the *Railway Safety Act* the Minister may order a railway company to formulate new rules or revise existing ones. Where a railway company fails to file a rule or revision as ordered by the Minister, the Minister may impose the rule or revision after the Minister has given the relevant associations (unions) an opportunity to consult with the Minister on the rule or revision to the rule.

Conclusion

In summary, the Working Group examined the following options available for the Minister to consider:

- railway companies voluntarily install voice/video recording devices;
- development of a new regulation;
- Section 20 industry voluntarily amends the existing Locomotive Inspection and Safety Rules and development of guidelines; and
- Section 19 Minister orders industry to amend the rules.

However, similar to previous Working Groups' findings (2006 and 2009) unions and industry respectively expressed the same concerns and positions.

Unions are concerned and oppose locomotive voice/video recorders, if used for compliance monitoring and disciplinary action by the railways. In addition, unions question why rail would be required to have video when no other mode is required to have this device.

Railway companies, on the other hand, support the installation of cab recording devices and firmly believe that a safety benefit can be derived from their use, but only if the information is to be used for safety performance monitoring as well as post-accident investigation. Railway companies cannot agree to shoulder the cost to install voice and video recorders if the sole use is for TSB post-accident investigation, as this approach would not result in improved safety. Railway companies also stress that installing voice recording devices without video recording capability would be ineffective to their safety programs.

VIA is proceeding with voluntarily installing and testing of cab voice-recording devices.

Despite the different perspectives on the issues, and given all the considerations, the Working Group members did reach consensus on the following key points, which, ultimately, are all factors contributing to the Working Group's final recommendation:

- TSB access only to voice (or video) recordings, provides minimal if any, safety benefit.

- TSB post accident investigation access provides an after-the-fact investigative tool not a preventive safety instrument.

- The lack of clarity with respect to the applicability and scope of the CTAISB Act is problematic and this issue needs to be resolved as it would affect any option that the Working Group recommended.

- The number of accidents and rate of investigation do not support the need for this LVR and video technology if used solely for post-incident investigation.

- A regulatory approach (development of a new regulation) in all likelihood would not be able to provide protection for third party information.

- Amending the existing rule is fraught with similar issues as developing a regulation and would not be optimal.

In summary, the Working Group examined the following options:

- railway companies voluntarily installing of voice/video recording devices;
- development of a new regulation;
- Section 20 industry voluntarily amends the existing Locomotive Inspection and Safety Rules and development of guidelines; and
- Section 19 Minister orders industry to amend the rules.

In light of the respective and differing aforementioned positions of TC, industry and union representatives, at this time, after weighing all the options cited above, the Working Group offers that the voluntary approach adopted by VIA Rail would best address the concerns of the TSB.

Given all considerations and factors examined, the Working Group considers that the voluntary approach is the best option to recommend to the Minister.

Appendix A

Terms of Reference
ACRS Working Group on Locomotive Voice and Video Recorders

Context

Following a VIA rail train derailment in Burlington, Ontario on February 26, 2012, the Minister referred the issue of Locomotive Voice Recorders (LVRs) to the Advisory Council on Rail Safety (ACRS) for immediate consideration.

ACRS has established a LVR Working Group to study the issue, report on its progress and make recommendations to ACRS.

Objective

The purpose of the Working Group is to conduct a comprehensive examination of LVRs as well as inward and outward facing video with the objective of providing options and recommendations on the best approach including considerations (such as pros/cons, investment/costs, benefits and parameters). This will include examining the uses, access, limitations, and retention (ownership and lifecycle of recordings).

General Principles

The following general principles will govern the Working Group:

- Working Group members have full opportunity to voice their opinions and participate;
- Discussions and decisions will be made acknowledging the range of viewpoints from various stakeholders who are participating;
- Discussions will take place in the spirit of cooperation and in recognition of the shared goal of railway safety;
- Working Group members agree to work towards consensus wherever possible; (where, consensus cannot be reached TC as the regulator will decide)
- Working Group members will meet as often as required to ensure work plan timelines are met.

Documentation

All documentation for working group meetings, including agendas and decision records will be sent to all working group members in a timely manner.

Deliverables

A final report with recommendations will be made to the Minister within six (6) months (no later than by December 31, 2012).

Reporting

Regular status updates on progress to the ACRS, TC-Industry Steering Committee and the Minister.

Membership

The Working Group is comprised of the following members:

Chair: Luc Bourdon, Director General, Rail Safety.

Members
Don Watts - CN
Robert Smith - CP
Marc Beaulieu - VIA
Suzanne Manaigre- GO Transit
Kevin MacKinnon - RAC
Rob Smith – Teamsters
Brian Stevens - CAW
Bill Brehl - TCRC
Mike Piche - USW

TC
Walter Carlson (Operations Management)
Susan Archer (Regulatory Affairs)
Paul Lepage (Equipment)
Ken Dejean (Equipment)

Secretariat
Carla White-Taylor
Krystal McColgan

Budget and Administrative Needs

The Secretariat will look after administrative needs (e.g. meeting arrangements, document preparation and distribution, records of decision, etc

Appendix B
Occurrences investigated by the TSB relating to Locomotive Voice Recorders (as of October 16, 2012

TSB Occurrence Number	Description of Occurrence	TSB report
R99T0017 Recommendation R03-02: "The Department of Transport, in conjunction with the railway industry, establish comprehensive national standards for locomotive data recorders that include a requirement for an on-board cab voice recording interfaced with on-board communications systems."	Train Passed a Signal Indicating Stop, VIA Rail Canada Inc., Train No. 52, Mile 232.8, Kingston Subdivision, Trenton Junction in Trenton, Ontario on January 19, 1999.	The report states: "Had the controlling locomotive cabs been equipped with voice recording capability, it may have been possible to determine more definitively the effectiveness of the crew's communications as they approached the occurrence location." http://www.tsb.gc.ca/eng/rapports-reports/rail/1999/r99t0017/r99t0017.asp
R09V0230	Main-Track Train Collision of Canadian Pacific Train No. 355-429 and Canadian Pacific Train No. 110-30, Mile 58.10 in the Mountain Subdivision in Redgrave, British Columbia on October 30, 20009.	The report states: "TC has implemented some performance specifications for data collection. However, the Board remains concerned that the notion of voice recordings as a valuable safety tool has not been implemented on the grounds of cross-border harmonization. http://www.tsb.gc.ca/eng/rapports-reports/rail/2009/r09v0230/r09v0230.asp
R10Q0011	Main-Track Derailment, VIA Rail Canada Inc., Passenger Train No. 15, Mile 100.78, Canadian National Montmagny Subdivision, Saint-Charles-de-Bellechasse, Quebec on February 25, 2010.	The report states: "The absence of voice recordings made it impossible to confirm the nature of VIA 15's communications. Where investigations are not able to understand all of the human factors involved, the Canadian railway industry is deprived of valuable information that can improve safety." http://www.tsb.gc.ca/eng/rapports-reports/rail/2010/r10q0011/r10q0011.asp
R11E0063	Main-Track Train Collision of Canadian National Freight Q-	On-going investigation.

TSB Occurrence Number	Description of Occurrence	TSB report
	101-31-21 and Canadian National Freight A0417-51-23, Mile 262.30, Wainwright Subdivision in Edmonton, Alberta on June 23, 2011.	
R11W0247	VIA Passenger Train 692 that exceeded its limits of authority at Mile 32.73 of the Togo Subdivision in Meharry, Manitoba on October 29, 2011.	The attached TSB Final Report released on October 15, 2012.  R11W0247-ENG-3FE .pdf
R12T0038	Main Track Train Derailment, VIA Passenger Train No. 92, Mile 33.3, Oakville Subdivision in Burlington, Ontario on February 26, 2012.	On-going investigation.