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**CRTC INTERCONNECTION STEERING COMMITTEE**

**REPORT to the CRTC**

**by**

**EMERGENCY SERVICES WORKING GROUP**

**Non-Consensus Report**

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**TITLE: Report on a Functional Architecture for the Implementation of  
VoIP E9-1-1 Service in Canada**

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**REPORT #: ESRE0044**

**DATE: 30 MAY 2007**

## I. Executive Summary

In Telecom Decision CRTC 2006-60, the Commission approved the recommendations in the CRTC Interconnection Steering Committee Emergency Services Working Group (ESWG) Consensus Report ESRE042, ESWG 12-month Consensus Report on Nomadic VoIP Technical and Operating Impediments to 9-1-1/E9-1-1 Service Delivery in Canada. The Commission also requested the ESWG to file, within six months of the date of the Decision, a functional architecture for the implementation of VoIP E9-1-1 service in Canada. The Commission agreed with the ESWG recommendation that the architecture should be consistent with the NENA i2 standard, adjusted as necessary for implementation in Canada, and that it should include a timeline for implementation of the key deliverable elements.

Since the approval of the report on 21 September 2006, the ESWG held several meetings and conference calls, deliberating on proposals put forth by various parties. The ESWG has been unable to come to a consensus on an architecture solution at this time and consequently is submitting this document as a non-consensus report.

## II. Background

In Telecom Decision CRTC 2005-21, the Commission directed the ESWG to submit a report identifying the technical and operational issues that impeded 911/E911 service delivery when local VoIP service was offered on a fixed/non-native basis. The ESWG submitted Consensus Report, **ESRE041**, *Identification of Issues for the Provision of 911/E911 Service to Fixed/Non-Native VoIP Customers*, dated 27 October 2005. The Commission approved the recommendations in ESRE041 in Telecom Decision CRTC 2005-73.

The Commission considered that until such time as a comprehensive solution, practical for implementation in Canada, is available, local VoIP service providers should be

required to implement interim solutions that provide a level of service functionally comparable to Basic 9-1-1 service.

Further in Decision 2005-21, the Commission also directed the ESWG to submit a similar report addressing 911/E911 service delivery for nomadic local VoIP customers. The ESWG submitted Consensus Report, **ESRE042**, *The ESWG 12-month Consensus Report on Nomadic VoIP Technical and Operating Impediments to 9-1-1/E9-1-1 Service Delivery in Canada*, dated 24 May 2006. This report followed up on the issues identified in the ESWG's previous report, ESRE041, as it was the conclusion of the ESWG that the impediments in Canada were common between the fixed/non-native and nomadic VoIP 9-1-1/E9-1-1 service delivery. The ESWG submitted in the report that the architecture should be consistent with the NENA i2 standard, modified as necessary for implementation in Canada and would include a timeline for the implementation of the key deliverable elements. The ESWG also requested that the industry be granted a minimum of 12 months, following Commission approval, to implement the Canadian i2 solution. The Commission approved the recommendations of ESRE042 in Telecom Decision CRTC 2006-60.

In Decision 2006-60, the Commission also requested the ESWG to file within six months of the Decision, a functional architecture for the implementation of VoIP E911 service in Canada.

### **III. Proposal from Bell Aliant, Bell Canada, Sasktel & TELUS**

Bell Aliant, Bell Canada, SaskTel and TELUS ('the Companies') submitted Contribution ESCO0283 proposing a functional architecture for the implementation of VoIP E9-1-1 service in Canada, based on a Canadianised version of the NENA i2 standard.

### **IV. Non-Consensus Items**

The preceding proposal did not gain the consensus of the ESWG and the non-consensus views are summarised as follows:

### ***A. Cable Carriers Non-Consensus items concerning the Companies Canadian i2 Model***

Cogeco, Rogers, Shaw and Videotron (“the Cable Carriers”) submitted Contribution ESCO0280 where they argued that the Companies proposed architecture contained several deficiencies and unknowns; such as wide deviations from the NENA i2 standards; exclusion of PacketCable standards; and unknown costs.

### ***B. CAVP Canadian i2 Non-Consensus items***

The Canadian Association of Voice Over IP Providers (CAVP) submitted Contribution ESCO0277 where it raised concerns regarding the viability of the Companies proposal; technical limitations and significant costs.

### ***C. QCISP Elements of non-consensus and proposed solutions***

In Contribution ESCO0281 the Quebec Internet Service Provider Coalition (QCISP). It submitted amongst other things, that the ILEC Ci2 implementation is not practical for implementation as it would require ISPs to place LIS’s in the real time emergency call path, as well it does not support location capable devices.

### ***D. Comwave, Primus and Vonage Non-Consensus items***

Comwave, Primus and Vonage, in contributions ESCO0262, 266, 271 and 272, raised concerns regarding a number of technical issues, implementation timing and product availability. In addition, these parties raised concerns about the unknown nature of the costs that could place an unfair and potentially crippling burden on a small segment of the industry.

## **V. Other Views**

### ***OAB Position***

In Contribution ESCO0279 the Ontario 911 Advisory Board (OAB) raised several concerns regarding the positions raised by the CAVP and QCISP. In addition, the OAB supported the Companies Canadian i2 proposal as noted in Section III above and noted that the proposal has recognized the unique nature of the Canadian 9-1-1 infrastructure.

## **VI. The Companies Position on Non-Consensus Items**

In response to the submission of the non-consensus items by other parties, the Companies submitted contribution ESCO0282 that provided their further clarifications and corrections.

## **VII. Conclusion**

As noted above the ESWG has been unable to come to a consensus on an architecture solution at this time. The ESWG requests the Commission to provide further direction and guidance in order that we can proceed with the development of an effective VoIP 911 solution in Canada.

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## Attachments

Contribution Number	Submitted by	Description
ESCO0262	Comwave, Primus, Vonage	Comments on the Canadian i2 Model
ESCO0266	Comwave, Primus, Vonage	Further Comments on the ILEC Canadian i2 Model
ESCO0271	Primus	The Canadian i2 Model – Funding Issues
ESCO0272	Comwave	Comments on: The 6-month Report on a Functional Architecture for the Implementation of VoIP E9-1-1 Service in Canada
ESCO0277	CAVP	CAVP Canadian i2 non-consensus document
ESCO0279	OAB	OAB Position re 6 Month Report
ESCO0280	Cogeco, Rogers, Shaw, Videotron	Cable Carriers – Non-Consensus Items concerning the Companies' Canadian i2 Model
ESCO0281	QCISP	Elements of non-consensus and proposed solutions
ESCO0282	Bell Aliant, Bell Canada, SaskTel, TELUS	Canadian i2 Proposal Non Consensus Clarifications and Corrections
ESCO0283	Bell Aliant, Bell Canada, SaskTel, TELUS	The Canadian i2 model