



Recommendation WG 12.95.042

TRANSBORDER COORDINATION :

TRANSBORDER EPCN PROCEDURE

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NSMA RECOMMENDATION WG12.95.042
ADOPTED 10-31-95

TRANS-BORDER EPCN PROCEDURE BETWEEN FIXED POINT-TO-POINT SERVICES

Electronic Prior Coordination Notices (EPCN's) relevant to USA - Canada trans-border frequency coordination between fixed point-to-point services and the associated processing messages will be exchanged between the Frequency Coordination System Association (FCSA) headquarters and the participating U.S. frequency coordination organization(s) via e-mail on Internet. FCSA HQ will not be involved in the communication of interference analysis as this information would be exchanged directly between the FCSA member operating companies and the U.S. frequency coordination organization(s).

An e-mail address will be set aside by FCSA HQ and each participating U.S. frequency coordination organization for the purpose of trans-border EPCN exchange. To facilitate automatic processing (eg, automatic access of the e-mail facility to retrieve/send EPCN's during a certain period each night) it will be necessary to 'tag' the EPCN - by standard header and footer records immediately before and after the EPCN.

The format of the EPCN itself will be in accordance with the current National Spectrum Managers Association (NSMA) Terrestrial EPCN Format Recommendation.

Attachment 1 to this Recommendation provides a list of FCSA members plus the Industry Canada contact for non-FCSA-member information.

U.S. ORIGINATED EPCN:

FCSA HQ will extract the EPCN from the e-mail message and convert it to the FCSA Primary Data File (PDF) format. If there are errors in conversion FCSA HQ will then e-mail the error message on Internet to the EPCN address of the originating U.S. frequency coordination organization. All conversion errors will be cleared by mutually agreed action.

The PDF, once validated by FCSA's Microwave Information & Coordination System (MICS), will be automatically input to a utility which will determine which FCSA members are within the keyhole coordination zone. An e-mail message will be automatically posted to the originating U.S. frequency coordination organization, listing the FCSA members involved which will be advised of the EPCN. Similarly, a message will go to each of these FCSA members giving them the PDF name and the U.S. source. It will be the FCSA member's responsibility to respond to the originating U.S. organization. An acknowledgement of receipt of the EPCN notice by the FCSA member(s) would be desirable. The FCSA member can then use the PDF to do an interference analysis on MICS and subsequently communicate with the

originating U.S. frequency coordination organization via whatever medium is considered suitable. It is proposed that a time limit of 30 days be recognized for an answer to be sent regarding interference cases: if no answer is sent by this time, the originator can assume no harmful interference is expected.

CANADIAN ORIGINATED EPCN:

An FCSA member will normally perform an interference analysis within the capability of the FCSA database. The FCSA member will then submit his PDF to a MICS utility to determine if his proposed system is within the Canada/U.S. coordination zone, in accordance with the current NSMA recommendation.

If his proposed system is within the Canada/U.S. coordination zone the FCSA member will coordinate with the U.S. organizations concerned by submitting the PDF to the MICS EPCN utility, which will convert the PDF to an EPCN format and send the EPCN within an e-mail message via Internet to all participating U.S. frequency coordination organizations. If a recipient U.S. organization finds errors in the EPCN, it should communicate these by Internet e-mail to the same address used for EPCN exchange. When errors in the EPCN are cleared to the mutual satisfaction of the parties involved, the U.S. organization(s) will acknowledge receipt by e-mail and perform the appropriate interference analysis. The U.S. frequency coordination organization(s) can then communicate results to the originating FCSA member via whatever medium is considered suitable.

It is proposed that a time limit of 30 days be recognized for an answer to be sent regarding interference cases: if no answer is sent by this time, the originator can assume no harmful interference is expected.

TAGS ENCLOSING EPCN CONTENT OF E-MAIL MESSAGES:

Three types of EPCN content may require recognition by a local computer for processing/routing:

- a) The EPCN itself
- b) A conversion error report
- c) Conversion success report
- d) A list of operators report

There must be:

- a) A unique character combination as part of a header and footer to indicate the start and end of the EPCN content
- b) A code to indicate the type of content (EPCN, conversion errors, list of operators)
- c) The subject EPCN serial number
- d) The subject EPCN revision number

Header and Footer Lines:

- a) EPCN:

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,,EPCN X.Y Begin ,,EPCN,serial_number,revision,,  
,,EPCN End ,,
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- b) EPCN Conversion Error Report:

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,,EPCN X.Y Begin ,,EPCN Errors,serial_number,revision,,  
,,EPCN End ,,
```
- c) EPCN Conversion Success Report:

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,,EPCN X.Y Begin ,,EPCN OK,serial_number,revision,,  
,,EPCN End ,,
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- d) EPCN List of Operators Report:

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,,EPCN X.Y Begin ,,EPCN Op List,serial_number,revision,,  
,,EPCN End ,,
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X.Y is the version number of the EPCN standard used (eg, 1.0).

The serial number must be unique within the originating coordination organization. Thus, the FCC or Industry Canada can make an overall unique identification by combining the coordinator name plus the coordinator serial number.

Because the foregoing tags are intended to enable automatic processing by a computer and therefore avoid human processing, it is possible that a human may never read the overall message (unless the computer directs the message to a local e-mail address to assist error correction). Thus it is recommended that the body of the message contain nothing but the EPCN content.

ATTACHMENT 1

LIST OF FCSA MEMBERS

and

INDUSTRY CANADA CONTACT

Date: 95-07-17

Directory

Source: FCSA

SF: TZM

Subject: MICS Technical group - Members

MICS USER

ORGANIZATION	MTG CONTACT	TELEPHONE	FAX
AGT	R. Axani	403-493-5853	403-493-5357
BC Hydro	T.K. Chia	604-528-3381	604-528-1828
BC Tel	P. Clark	604-432-4626	604-432-2050
BC Tel Mob C	L. Hamilton	604-293-4596	604-293-4584
Bell Can-OR	L.W. Lainchbury	519-663-4806	519-432-5735
Bell Can-QR	T. Huynh	514-870-0850	514-870-7157
Bell Mob C-E	M. Lavoie	514-421-4939	514-953-4851
Bell Mob C-W	C. Czernuszka	416-798-5223	416-674-7393
Hydro-Quebec	R. Morin	514-289-7540	514-289-7823
Island Tel	P. Landers	902-487-4806	902-423-1795
Man Tel Sys	C. Woo	204-941-7816	204-774-9441
Mar Tel&Tel	P.Landers	902-487-4806	902-423-1795
Microcell	J.Y. Bernard	514-937-2121	514-937-2554
NB Tel	S. McKenney	506-694-2890	506-694-6525
Nfld Tel	B. Barnes	709-739-2066	709-739-2183
Northern Tel	F. Palumbo	705-647-7311	705-647-3568
Northwestel	G.D. Bushell	403-668-5385	403-667-6636
OPP Telec Br	E. Buchanan	705-329-7604	705-329-6230
Ont Hydro	M.C. Yee	416-592-7928	416-592-1905
Ont No Telec	G. Boomhour	705-472-4500	705-472-6765
Que Tel	R. Poirier	418-722-5204	418-722-5688
Rog Cantel	R. Leung	416-250-4085	416-250-4988
SaskTel	R. Champion	306-777-2456	306-359-0511
Stentor CNM	R. Li	416-353-1215	416-215-4710
Telebec	M. Maurice	514-493-5433	514-493-5650
Teleglobe	R. Liboiron	514-868-7633	514-868-7473
Telesat	G. Nedoborski	613-748-0123	613-748-8712
Unitel	G.A. Cassan	416-345-2635	416-345-2986
Westel	H. Freiberg	604-990-2042	604-990-2020

FCSA	A. Moreno	613-241-3080	613-241-9632
FCSA	A. Gomez	613-241-3080	613-241-9632

MICS TECHNICAL GROUP (MTG) - COMPLETE LIST

MICS USER ORGANIZATION	NAME AND ADDRESS	TELEPHONE / FAX NUMBER
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AGT	Mr. R.(Ralph) Axani Senior Engineer Radio and Multiplex Standards and Acceptance AGT Limited 10020-100 Street Floor 18-G Edmonton, Alberta T5J 0N5	403-493-5853(T) 403-493-5357(F)
BC Hydro	Mr. T.(Timothy)K. Chia, P.Eng. Control & Communications Planning British Columbia Hydro & Power Podium A01 6911 South Point Drive Burnaby, British Columbia V3N 4X8	604-528-3381(T) 604-528-1828(F)
BC Tel	Mr. P.(Peter) Clark Engineering Supervisor Radio Systems Design British Columbia Telephone Co. 3777 Kingsway, 7th Floor Burnaby, British Columbia V5H 3Z7	604-432-4626(T) 604-432-2050(F)
BC Tel Mob C	Mr. L.(Larry) Hamilton M/W Systems Senior Engineer BC Tel Mobility Cellular 4519 Canada Way 4th Floor Burnaby, British Columbia V5G 4S4	604-293-4596(T) 604-293-4584(F)
Bell Can-OR	Mr. L.(Lawrence)W. Lainchbury Network Equipment & Design Bell Canada 100 Dundas Street Floor 7R London, Ontario N6A 4L6	519-663-4806(T) 519-432-5735(F)

MICS USER ORGANIZATION	NAME AND ADDRESS	TELEPHONE/ FAX NUMBER
Bell Can-QR	Mr. T.(Thanh) Huynh Engineer-Radio Communications Bell Canada 700 rue de La Gauchetiere St. W. Floor 21N2 Montreal, Quebec H3B 4L1	514-870-0850(T) 514-870-7157(F)
Bell Mob C-E	Mr. M.(Michel) Lavoie Engineer Network Transmission Eastern Region Bell Mobility Cellular 8501 TransCanada Hwy. St-Laurent, Quebec H4S 1Z1	514-421-4939(T) 514-953-4851(F)
Bell Mob C-W	Ms. C.(Christina) Czernuszka Network Transmission Engineer Western Region Bell Mobility Cellular 20 Carlson Court, Suite 900 Rexdale, Ontario M9W 6V4	416-798-5223(T) 416-674-7393(F)
Hydro-Quebec	Mr. R.(Robert) Morin Direction Telecommunications Hydro-Quebec 680 Sherbrooke Ouest Etage 12 Montreal, Quebec H3C 4T8	514-289-7540(T) 514-289-7823(F)
Island Tel	Mr. P.(Peter) Landers Supervising Engineer Transmission Design Maritime Tel. & Tel. Co. 7 N. Maritime Center 1505 Barrington Street P.O. Box 880 Halifax, Nova Scotia B3J 2W3	902-487-4806(T) 902-423-1795(F)

MICS USER ORGANIZATION	NAME AND ADDRESS	TELEPHONE/ FAX NUMBER
Man Tel Sys	Mr. C.(Chris) Woo Network Planner Manitoba Telephone System 489 Empress Street Room B402 Winnipeg, Manitoba R3C 3V6	204-941-7816(T) 204-774-9441(F)
Mar Tel&Tel	Mr. P.(Peter) Landers Supervising Engineer Transmission Design Maritime Tel. & Tel. Co. 7 N. Maritime Center 1505 Barrington Street P.O. Box 880 Halifax, Nova Scotia B3J 2W3	902-487-4806(T) 902-423-1795(F)
Microcell	J.Y. (Jean-Yves) Bernard Sr. Engr. RF Design 1250 Boul Rene Levesque ouest Suite 400 Montreal, Quebec H3B 4W8	514-937-2121(T) 514-937-2554(F)
NB Tel	Mr. S.(Scott) McKenney Senior Technologist New Brunswick Telephone Co. One Brunswick Square, 6th Floor P.O. Box 1430 Saint John, New Brunswick E2L 4K2	506-694-2890(T) 506-694-6525(F)
Nfld Tel	Mr. B.(Brian) Barnes Senior Engineer - Network Planning Newfoundland Telephone Co. P.O. Box 2110 St. John's, Newfoundland A1C 5H6	709-256-5240(T) 709-651-3280(F)
Northern Tel	Mr. F.(Fred) Palumbo Engineering Manager Transmission & Planning Northern Telephone Ltd. 11 Paget Street New Liskeard, Ontario P0J 1P0	705-647-7311(T) Ext. 3520 705-647-3568(F)

MICS USER ORGANIZATION	NAME AND ADDRESS	TELEPHONE/ FAX NUMBER
Northwestel	Mr. G.(Glen)D. Bushell Mgr Transport Network & Support Northwestel Inc. 301 Lambert Street Whitehorse, Yukon P.O. Box 2727 Y1A 4Y4	403-668-5385(T) 403-667-6636(F)
OPP Telec Br	Mr. E.(Eric) Buchanan Manager, Microwave Section OPP Telecommunications Branch 50 Andrew Street South Orillia, Ontario L3V 7T5	705-329-7604(T) 705-329-6230(F)
Ont Hydro	Mr. M.(Mike)C. Yee Telecommunications Engineer - Specialist Ontario Hydro 60 Murray Street, M1C3 Toronto, Ontario M5G 1X6	416-592-7928(T) 416-592-1905(F)
Ont No Telec	Mr. G.(Gary) Boomhour Technical Assistant - Engineering Ontario Northland Telecommunications 555 Oak Street East North Bay, Ontario P1B 8L3	705-472-4500(T) 705-472-6765(F)
Que Tel	Mr. R.(Rene) Poirier Ing. Transmission Quebec Telephone 9 rue Jules A. Brillant Department 616 Rimouski, Quebec G5L 7E4	418-722-5204(T) 418-722-5688(F)
Rog Cantel	Mr. R.(Richard) Leung Senior Transmission Engingeer Rogers Cantel Inc. 4101 Yonge Street North York, Ontario M2P 1N6	416-250-4085(T) 416-250-4988(F)

MICS USER ORGANIZATION	NAME AND ADDRESS	TELEPHONE/ FAX NUMBER
SaskTel	Mr. R.(Bob) Champion Engineering Assistant Saskatchewan Telecommunications 2121 Saskatchewan Drive, 9th Floor Regina, Saskatchewan S4P 3Y2	306-777-2456(T) 306-359-0511(F)
Stentor CNM	Mr. R.(Ray) Li Microwave Radio System Group Stentor Resource Centre Inc. 220 Simcoe Street, 10th Floor Toronto, Ontario M5T 1T4	416-215-4710(T) 416-979-9688(F)
Telebec	Mr. M.(Max) Maurice Director Planning & Design Telebec Ltee 7151 Jean-Talon E., Bureau 418 Anjou, Quebec H1M 3N8	514-493-5433(T) 514-493-5650(F)
Teleglobe	Mr. R.(Ron) Liboiron Satellite Systems Engineering Network Operations Teleglobe Canada 1000 rue de La Gauchetiere St. W. Montreal, Quebec H3B 4X5	514-868-7633(T) 514-868-7473(F)
Telesat	Mr. G.(George) Nedoborski Supervisor Domestic Coordination and Licensing Telesat Canada 1601 Telesat Court Gloucester, Ontario K1B 5P4	613-748-0123(T) 613-748-8712(F)
Unitel	Mr. G.(Glen)A. Cassan Radio Design Specialist Unitel Communications Inc. 200 Wellington Street West 9th Floor Toronto, Ontario M5V 3G2	416-345-2635(T) 416-345-2986(F)

MICS USER ORGANIZATION	NAME AND ADDRESS	TELEPHONE/ FAX NUMBER
Westel	Mr. H.(Hans) Freiberg Transmission Engineer Westel Telecommunications Ltd. #121 - 949 West Third Street North Vancouver, British Columbia V7P 1B4	604-990-2042(T) 604-990-2020(F)
FCSA	Mr. A.(Alejandro) Moreno Radio Systems Engineer Frequency Coordination System Association 1 Nicholas Street Suite 700 Ottawa, Ontario K1N 7B7	613-241-3080(T) 613-241-9632(F)
FCSA	Mr. A.(Allen) Gomez Computer Services Engineer Frequency Coordination System Association 1 Nicholas Street Suite 700 Ottawa, Ontario K1N 7B7	613-241-3080(T) 613-241-9632(F)

Industry Canada contact for non-FCSA-member information

Bob McRae (613) 999-3793