

April 28, 2016

Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

RE: IB Docket No. 12-267, DA 16-367
Compliance response of proposed CID Section 25.281(b)

ELECTRONICALLY FILED VIA ECFS

To Whom It May Concern:

Compliance with the Carrier Identification Requirements would render all but two modulators in our fleet of trucks useless. Our current complement of noncompliant modulators consists of:

- 4 - Tandberg¹ 5740 encoder/modulator sets
- 4 - Tandberg 5788 encoder/modulator sets
- 2 - Adtec EN-81 encoder/modulator sets

We anticipate getting another five to ten years of service out of these units.

Venessa Chen of Ericsson² verified the modulator sections in the 5740 and 5788 units are not upgradable to comply with the new carrier identification requirements.

Jonathan Redford of Adtec³ verified the modulator boards in the EN-81 encoder/modulator sets are not upgradeable to comply with the new carrier identification requirements.

Maintaining our current transmission capabilities under the new regulations requires us to purchase and install ten external modulators before Sept of 2017.

So far, the lowest quote I've received on modulators are \$8100 each from a company called Teamcast.⁴ I know very little about the company when it comes to reliability and quality of signal.

The next lowest quote is from Sencore⁵ at \$10,376 each. Sencore is a well established company in the broadcast industry. However, I am told by those using Sencore modulators that earlier models were failure prone and difficult to operate. The current models do not have an established track record that I can find.

¹ Tandberg is now known as Ericsson

² See attached e-mail from Venessa Chen from Ericsson for verification.

³ See attached e-mail from Jonathan Redford from Adtec for verification.

⁴ See attached quote from Teamcast.

⁵ See attached quote from Sencore.

In verbally discussing modulator prices with sales people and those in our industry that have bought them, I am finding the going rate per modulator to be somewhere between \$13,000 and \$17,000 from companies with established track records of reliability in a mobile truck mounted environment and quality of transmission.

The difficulty in nailing down exact prices is many of these units are built ala carte. The consumer purchases the base unit. But everything it does requires an additional license at additional cost. DVB-2, 8PSK, 16APSK, L-Band out, wide bandwidth, etc. each adds one to four thousand dollars to the price of each modulator.

The result is that if my company was to roll the dice and go with the low bid, we would still be required to pay \$81,000 plus time and materials to install the units. However, not many low cost broadcast items are engineered to stand up under the physical vibration and shocks that are normal to a mobile, truck mounted environment.

It is more likely with the nature of our work being critical to the broadcasters we serve, the total expense before labor and material for installation would be in the range of \$130,000.

Unlike fixed operations, satellite trucks have very limited rack space. Having to add external modulators takes away from that valuable rack space and limits other services we may be able to offer our clients in the future.

The Carrier Identification burden being placed on the domestic transportable uplink industry is vexing for a number of reasons. These are uplinks on trucks. When these transportable uplinks are not actively transmitting, the trucks are powered down. In most cases when powered down, the dish antenna is stowed leaving no possible threat for interference.

In the meantime just three weeks ago during a live sporting event my signal was knocked off Intelsat's Galaxy 17 (91° W), Ku transponder 20-upper (14409 MHz horizontal up, 12109 MHz vertical down) by something the satellite controllers at Intelsat refer to as a "sweeper." These are rogue transmissions from a VSAT terminal trying to "phone home," usually occurring when that antenna is moved off axis from the intended satellite.

VSAT interference is not uncommon. While the satellite operators are loathe to go on the record about VSAT interference, inquiries from the commission may reveal the vast majority of Ku band domestic satellite interference is caused by VSAT units.

For all intents and purposes VSAT units are unattended automated transmitters. But yet they are specifically excluded from the CID requirements.

To the best of my knowledge, there is not a lot of malicious satellite interference on this side of the planet. But I would be remiss not to point out the requirement for carrier

identification will almost certainly be lost on those intentionally setting out to misuse satellites in the domestic arc.

In summary, it is our view that carrier identification may be a positive step toward solving some of the problems encountered in satellite transmission going forward. However, we do not see the problem as severe enough to warrant the forced expense of forcing an entire industry to purchase new modulators at an industry cost that is staggering when one starts counting the number of satellite trucks in this nation.

It is also our view that transportable uplinks are not a significant source of interference on the domestic satellite fleet. As such, these costs are unwarranted and existing equipment should be grandfathered in.

Thank you for your attention to our comments on this matter.

Respectfully Submitted,
Leland Kesler
Midwest Uplink

Subject: CID not supported with EN57XX series encoder
From: Vanessa Chen <[REDACTED]>
Date: 4/7/2016 5:58 PM
To: "Leland ([REDACTED])" <[REDACTED]>

Hi Leland,

Unfortunately EN57XX series encoder does not comply with CID, also this series has been end of life, there is also no aftermarket HWO or SWO upgrade available.

Ericsson encoders that support CID will be VOYII or AVP3000.

Thanks and have a great day!

VANESSA CHEN
TV Compression Support Americas
Customer Support Administrator
BUSS MEDIA CBL Services

Ericsson
3400 Rivergreen Court, STE#300
Duluth, GA 30096, USA
Phone 1-888-671-1268, Option 1
[REDACTED]
www.ericsson.com

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Subject: Re: Strange request
From: Jonathan Redford <[REDACTED]>
Date: 4/7/2016 12:24 PM
To: Leland <[REDACTED]>

Leland,

I will ask management for numbers.

Essentially all EN80s, EN81s, EN91s, EN91Ps, and very early EN100s are not CID compliant. Only the EN100s can have a hardware upgrade, at a cost, to a new modulator.

We use Newtec OEM boards. You can see them here:

<http://www.newtec.eu/products/oem-boards>

Our current modulator is the OM6000 which is CID compliant, this is in our EN100s and EN200s. In the older units we used the 7029 and 7139 which are under the End of Life OEM boards link at the bottom.

I will let you know what I find out on the numbers.

Thanks,

--

Jonathan Redford
Product Application Specialist
Adtec Digital
Cell: +1 (630) [REDACTED]
Skype: [REDACTED]

Leland

Thursday, April 07, 2016 11:14 AM

Hi Jonathan,

Can you give me something from your company listing inboard modulators by model number and what encoders they went in that cannot be upgraded to the new carrier ID specifications? It would really be cool to know roughly how many are out in the field, but I know that might be touchy info, so if you can't provide that, I understand.

This information will be included in a comment going to the International Bureau of the Federal Communications Commission on the Carrier ID push.

Leland

QUOTE N° TU-CPC-1602014

Date	25-Febr.-2016
TeamCast Contact	Mark POLOVICK

Incoterms
EXW - Elmira, NY - USA

Standard Warranty
12 months - return to factory

To the attention of:	
Name:	Kesler Leland
Company:	Midwest Uplink, INC.
Address:	911 N East Street
	46202 Indianapolis, Indiana
Country:	United States of America

N°	Designation	Possible Shipment (1)	Quantity	Unit Price	Total Amount
1	XSSR-VYP0-2502 Vyper: DVB-S/DSNG/S2 Satellite Modulator 50/180 & 950/2150 MHz Out, +5/-30 dBm 1U Rack	2/3 weeks	1	\$ 8 100,00	\$ 8 100,00

TOTAL	\$8 100,00
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Comment
(1): According to the stock availability (2): equipment in stock could be released one week after receipt of your payment
All federal, state, local and foreign taxes are not included and shall be paid by the buyer.

Payment terms	Validity date
Transfer - Advance payment (2)	10-Apr.-2016

<p>TeamCast inc 100 North Main Street Suite 203 Elmira, NY 14901 United States of America</p>	<p>Tel: +1 312 263 0033 E-mail: mark.polovick@teamcast.com</p>
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GENERAL CONDITIONS OF SALE OF TEAMCAST, INC

These terms and conditions constitute a complete statement of the agreement between Client and TEAMCAST, INC. ("TEAMCAST"), which shall not be supplemented or amended, except by a separate written agreement signed by both parties. Terms and conditions of Client additional or varying from those set forth herein shall not be binding on TEAMCAST unless specifically agreed to in writing by TEAMCAST. TEAMCAST's acceptance or acknowledgement of a purchase order shall not constitute such written agreement to supplement or amend the agreement.

1- ORDERS

1.1 Orders placed with TEAMCAST must be sent in writing by fax or e-mail followed by hard copy confirmation within eight days, except otherwise agreed.

1.2 Written quotations automatically expire thirty (30) calendar days from the date issued unless otherwise stated on the face of the quotation. Quotes are subject to termination by notice within that period. Quotations are subject to correction in the event of stenographic or clerical errors. Prices quoted are for the Client set forth therein, specific quantities shown, released for manufacture and shipment at one time to one destination unless otherwise stated. Any change in the quantity of an order and/or split shipment is subject to price revision.

1.3 The cancellation or interruption of an order shall only be valid with the consent and written approval of TEAMCAST. Where cancellation is accepted, the purchaser shall be liable for payment of a restocking fee which must cover the total amount of costs already incurred. In all cases, said restocking fee shall amount to at least 30% of the total sale price.

2- PRICES

2.1 The prices indicated in all price lists or quotations shall be given in United States Dollars exclusive of all city, state and federal excise taxes, including without limitation, taxes on manufacture, sales, receipts, gross income, occupation, use and similar taxes. Wherever applicable, any tax or taxes will be added to the invoice as a separate charge to be paid by Client.

2.2 Subject to Section 1.2 hereof, prices are final and shall not be subject to revision. Notwithstanding the foregoing, orders calling for future shipment will be billed according to the price in effect at the time of shipment, unless otherwise specified.

3- CONDITIONS OF PAYMENT

3.1 TEAMCAST shall issue a pro forma invoice with respect to each purchase order. Client shall make payment in full by wire transfer or check before delivery of the goods. A final invoice is issued on the date of delivery. All payments hereunder shall be made at the address indicated on the face of this document. No payment by Client, or acceptance of any payment by TEAMCAST, of any amount less than the full invoice price for the goods shall be deemed to be other than payment on account, nor shall any endorsement or statement on any check or in any letter accompanying any check or payment be deemed the basis for accord and satisfaction. TEAMCAST may accept such check or payment without prejudice to its rights to recover the balance due and to pursue any other remedies available to it.

3.2 Except as specifically stated in the quotation, a purchase order shall only be processed and shipped upon receipt and collection by TEAMCAST of the purchase price indicated in the pro forma invoice. If TEAMCAST grants Client payment terms, prompt payment is of the essence of this contract and a default in any payment (in whole or in part) shall, at the option of TEAMCAST, operate as a breach by Client of contract.

3.3 Failure to pay may result in TEAMCAST suspending or cancelling the delivery of orders in progress and reclaiming any goods already supplied. In the event of non-payment in full of a purchase order, TEAMCAST may retain any deposit made or payment made on account by Client. Any indebtedness owing to TEAMCAST for a period longer than thirty (30) days shall bear interest until paid in full at the rate of 1.5% per month. If TEAMCAST finds it necessary to place any indebtedness hereunder in the hands of an attorney for collection,

Client shall pay all expenses and costs of collection, including reasonable attorney's fees. All costs and expenses incurred by TEAMCAST as a result of its exercise of any right or option under this paragraph shall be for the account of Client.

3.4 Advance payment does not entitle Client to any, discount, rebate or set-off.

4- PACKAGING AND TRANSPORT

4.1 Unless otherwise stated on the face of the quotation, all packaging will be in accordance with TEAMCAST's standard practices for shipments. Packaging costs are included in the price.

4.2 Carriage costs and any taxes in the country of final destination shall be borne by Client.

4.3 Method and route of shipment are at Client's discretion. When Client requires specific method of shipment, any additional shipping expense will be charged to Client. Shipping charges are not intended to guarantee the delivery at or to destination. An invoice and the relevant delivery bill shall be provided by TEAMCAST with respect to each shipment.

5- DELIVERY

5.1 Delivery dates stated on quotations are given only as a guideline, and delays shall not entitle Client to cancel the sale, refuse the goods or sue for damages. Shipments made within twenty (20) days after the specified date of shipment shall constitute a good delivery. Any delivery not in dispute shall be paid for regardless of other controversies relating to other delivered or undelivered merchandise.

5.2 Delivery shall be subject to and contingent upon strikes, labor difficulties, riot, war, governmental interference or embargoes, fires, floods, accidents, acts of God, force majeure, shortages of fuel, power, materials or supplies, transportation delays, or any case beyond the control of Seller. All deliveries are subject to restrictions imposed from time to time by government regulation, order or directive. In the event of such delay, TEAMCAST shall have the option to extend the time for delivery of a period equal to the number of days of such delay, provided, however, that in the event that such delay shall exceed ninety days, then Client shall have the right to cancel this contract, in writing, without further liability or responsibility on the part of either party, it being understood that the right of canceling shall be the sole and exclusive remedy of Client in such event. TEAMCAST shall not be liable for any loss or damage arising therefrom.

5.3 For delays over 90 days not resulting from force majeure, and where the two parties are unable to reach agreement on new delivery dates, the sale may be cancelled by Client.

5.4 On delivery, Client shall be responsible for checking the conformity and condition of the goods received. If necessary, Client shall make any appropriate reservations and file any claim in the event of partial or total loss, damage, or delay, with the shipping company or carrier. Client must also give written notification to TEAMCAST of any anomaly or non-compliance within 8 days of the date of delivery. If no such notification is given, the delivery shall be deemed to have been in conformity with the purchase order and accepted.

6- TRANSFER OF RISKS AND OWNERSHIP

6.1 All shipments are made "ex works" (as such term is defined in INCOTERMS 2000) TEAMCAST's facility in Elmira, New-York.

6.2 All sales are subject to a title retention clause. Consequently, transfer of ownership of the goods sold to Client is suspended until full payment of the purchase price, interest and incidental costs has been made. Risks are borne by Client from the time the goods are supplied to the carrier. Client must therefore ensure good conservation of the goods and their packaging, their conformity with the sales documents, as well as their identification in Client's warehouses and stores, until transfer of ownership in Client's favor. In case of non-payment for the goods upon the due date, as in the case of non-fulfillment of any of Client's obligations, TEAMCAST, in its sole discretion, shall have the right to cancel the sales contract. TEAMCAST shall also have the right to repossess the goods or to obtain a security interest in the goods. To this effect, Client hereby gives an irrevocable power of attorney to TEAMCAST to complete, sign and file any financing statement against

TeamCast Inc.
100 North Main Street
Suite 203
Elmira, NY 14901



Client. If TEAMCAST must repossess any unpaid goods, Client agrees to pay as liquidated damages a sum equal to 15% of the agreed upon purchase price of such goods for each month in which such goods were in the possession of Client. TEAMCAST shall have the right to apply all partial payments made by Client for such goods to the payment of the liquidated damages heretofore mentioned.

7- DRAWINGS AND PRELIMINARY DESIGNS

TEAMCAST retains full intellectual property of its designs, which may not be communicated to others or executed without its written authorisation.

8- INDUSTRIAL AND INTELLECTUAL PROPERTY

8.1 Except where authorisation is given, documentation and software shall not be copied or amended, translated or adapted into any other software language or foreign language by Client. However, Client may make 2 copies for filing purposes and for the replacement of a defective copy.

8.2 Should Client be sued in relation to a product supplied by TEAMCAST on grounds of breach of an industrial or intellectual property right held by a third party, TEAMCAST shall assume responsibility for the defence case at its own cost, shall conduct the proceedings and shall pay any damages awarded to the said third party. This commitment is subject to the obligation upon Client to inform TEAMCAST immediately in writing of any claims lodged, and to leave TEAMCAST free to reach a compromise.

8.3 Customer hereby acknowledges and agrees that it is solely authorised to use the TeamCast firmware as integrated into the TeamCast products and that it is strictly prohibited from reproducing, modifying, reverse engineering, decompiling, or otherwise discovering the source code of the TeamCast products. Customer further acknowledges and agrees that the delivery of TeamCast products does not convey to Customer any ownership interest in any of TEAMCAST's Intellectual Property Rights, including but not limited to those in the FPGA software or the TeamCast firmware and related documentation or any patents, patent applications, works of authorship, trade secrets, know-how, ideas, or any other subject matter protectable under Intellectual Property Rights laws of any jurisdiction covering the TeamCast technology or any portion thereof and that TEAMCAST is the sole and exclusive owner of and retains all worldwide rights, title, and interest in and to all TeamCast technology, the FPGA software, the TeamCast firmware, the documentation, and all Intellectual Property Rights in each of the foregoing.

8.4 Purchasing a Mobile TV or Digital TV product from TEAMCAST does not imply the grant of rights under any patents of third parties, by licence or otherwise. If Client is not yet licensed, it shall approach the Mobile TV or Digital TV Technology administrator, as the case may be, in order to apply for a licence, if it is necessary.

9- WARRANTY AND LIMITATION OF LIABILITY

9.1 TEAMCAST warrants that the goods will be free from defects in materials and workmanship, under normal use and responsible care. ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE HEREBY EXCLUDED AND DISCLAIMED. Client assumes all risks and liability (including liability for patent infringement) resulting from the use of the goods, including any change in their composition or form, or the use of the same in combination with other substances. The goods are guaranteed for parts and labour for 1 year from the date of delivery. During the warranty period, TEAMCAST shall where necessary repair or replace all components that are acknowledged to be faulty. The products shall be returned to TEAMCAST, carriage to be paid by Client.

9.2 Warranty shall not apply to defects caused by incorrect installation, incorrect or inadequate maintenance, non-standard interconnections which do not comply with technical specifications, incorrect usage or any modifications other than those made by TEAMCAST.

9.3 In no event shall TEAMCAST be liable for prospective profits, or indirect, incidental, or consequential damages of Client. In the event of a breach or repudiation by TEAMCAST hereunder, the aggregate

amount of recovery, judgment, or award which may be obtained by Client against TEAMCAST hereunder shall not exceed the purchase price of the goods described on the face hereof. The right to recover the said purchase price of the goods shall constitute the sole and exclusive remedy of Client hereunder.

10- DEFAULT: Client shall be in default hereunder if any one or more of the following events occurs: (A) Client shall default in fulfilling any of its obligations to TEAMCAST; (B) a receiver, liquidator, or trustee of Client, or of any of its property, is appointed by court order; (C) Client is adjudicated bankrupt or insolvent; (D) any property of Client is sequestered by court order; (E) a petition is filed by or against Client under any bankruptcy, reorganization, arrangement, insolvency, dissolution or liquidation law of any jurisdiction; or (F) Client becomes insolvent, makes an assignment for the benefit of its creditors, admits in writing its inability to pay its debt generally as they become due, or consents to the appointment of a receiver, trustee, liquidator of Client or of all or any substantial part of its property. In any such case, all unpaid amounts shall, at TEAMCAST's option, become immediately due and payable and TEAMCAST shall have the right to consider this contract with Client cancelled, to recover damages, and shall further have all the rights and remedies, including those of a secured party, provided by applicable law.

11- ATTRIBUTION OF COMPETENT JURISDICTION

Any dispute, controversy, or claim arising out of or relating to this contract or the performance hereof or the goods delivered hereunder shall be referred to, determined and settled by, arbitration by one arbitrator in accordance with the Rules of Practice and Procedure then obtaining of the American Arbitration Association, sitting in New York City. TEAMCAST and Client hereby consent and submit to the jurisdiction of the Supreme Court of New York and agree that the said Court may issue such orders or judgments as may be necessary to compel arbitration hereunder or to enforce any award made by the arbitrator. TEAMCAST and Client further agree that any process or notice of application or motion to such Court or a Judge thereof may be served outside the State of New York by certified mail or by personal service or in any other manner permitted by the Civil Practice Law and Rules of the State of New York. The authority of the arbitrator is expressly subject to the provisions of these Terms and Conditions of Sale, which shall control.

12- TRADEMARKS: The use of any of TEAMCAST's trademarks, or the description of any goods by trademark on the face hereof, shall not be deemed to give Client either the authority or a license to utilize the said trademark in connection with subsequent description of the goods, whether on resale or otherwise. The authority to use such trademark may be secured only by license of the owner thereof.

13- GENERAL: The provisions on the face hereof and these Terms and Conditions constitute the entire agreement among the parties and supersede the provisions of any purchase order, other communication between the parties or any statement or representation not included herein. No modification of this agreement shall be binding unless in writing signed by both parties, no waiver by either party of any default shall be deemed a waiver of any subsequent default. This agreement shall be governed by the laws of the State of New York.

14- SEPARABILITY: Each of the provisions of this contract, and of these Terms and Conditions is separable. In the event that any of the said provisions hereof shall, for any reason, be held to be void or unenforceable the remaining provisions shall remain in full force and effect, and shall control.

15- MERGER: Any and all oral representations or statements made by the parties heretofore are merged herein and the rights of the parties shall be governed exclusively by the provisions, terms and conditions thereof.

TeamCast Inc.
100 North Main Street
Suite 203
Elmira, NY 14901

Quotation

Quote# : 192759 - 1
 Date : 20-APR-2016
 Expires : 20-MAY-2016
 Page : 2 / 2

Line	Product	Units	Qty	Unit Price		Unit Price		Total Price		Total Price		Total Charges (USD)
				List (USD)	Adj. (USD)	Selling (USD)	Unit Price	List (USD)	Adj. (USD)	Selling (USD)	Total Price	
6.0	SMD 920 L-BAND UP-CONVERTER	EA	1	1,200.00	-300.00	900.00	1,200.00	-300.00	900.00	900.00	0.00	
	Freight Charge (FREIGHT)											
	0.00 (USD)											

Subtotal	List Price	13,731.24
	Total Adjustment	-3,355.24
	Selling Price	10,376.00
Line Level Charges		
	Freight Charge (FREIGHT)	12.16
Tax		
	Tax Amount	0
Total (USD)		10,388.16

Sencore quoted prices apply for 30 days or as otherwise stated in its quote. Prices are for Products only and do not include taxes or other charges, fees, shipping charges and duties imposed by any government authority. Customer is responsible for any and all additional fees and taxes. All orders placed with Sencore are subject to our Terms and Conditions which can be found on our website at <http://www.sencore.com/sales-terms.html>