

**January 15, 2025****Addendum No. 02****File Reference Number: RFP 2024 058****Title: ONTC Motor Coach Video Surveillance System Replacement****RE: Clarifications/Questions**

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Please refer to the following information/clarifications:

**Item 1:** Do you require a Network Switch?**Answer:** Yes, ONTC will require a Network Switch.**Item 2:** Are there any vehicle schematics or diagrams that we could see so that we can suggest camera layout positions?**Answer:** Please find attached the Surveillance Camera Schematic Layout at Appendix A of this Addendum No. 02.**Item 3:** Are there multiple doors on the buses or only one (1) door?**Answer:** There is one main entrance door. For wheelchair accessible coaches, there is an additional wheelchair access door in either the middle or rear of the coach (depending on the model of the bus).**Item 4:** Could this system be used for camera-based video analytics in the future such as passenger counting, driver behavior, etc.?**Answer:** Yes, it could be.**Item 5:** Are forward facing and rear facing cameras needed? If so, could these be mounted inside the vehicle (For the front facing camera - looking through the windshield and for the rear facing camera - looking through the rear window if there is a window in the rear of the bus).**Answer:** Yes, both front facing and rear facing cameras are needed. The front facing camera will be mounted inside and the rear facing camera will be mounted outside.

**Item 6:** Are exterior cameras required and if so, what is the purpose of the exterior cameras?

**Answer:** Yes, exterior cameras are required. The purpose of exterior cameras is to observe passenger activity around the coach and other pedestrians and traffic (collision events, other incidents).

**Item 7:** Are there any requirements for frames per second (FPS) related to recording?

**Answer:** 24 fps to 30 fps preferred.

**Item 8:** Is there a minimum resolution required for recording?

**Answer:** 1080 or higher preferred.

**Item 9:** Would h.264 be sufficient for the video compression?

**Answer:** H.264 is sufficient.

**Item 10:** Will there be a possibility for on-prem storage of offloaded video or is a cloud solution required for the recordings?

**Answer:** Preference is to have footage stored on each coach and be remotely accessible as required (live or recorded). Cloud preview (thumbnails) is also preferred.

**Item 11:** Can the long-term recordings (the recordings sent off of the vehicle) be stored for longer than 30 days? Would 90 days be acceptable whether on-prem or cloud based?

**Answer:** Recordings requested by ONTC for review can be stored longer than 30 days.

**Item 12:** Does the on-board recording need to be redundant?

**Answer:** It is preferred to have redundancy for a hard drive failure on a coach so that it does not lose all footage due to a drive failing. Full unit redundancy is not required, as long as the system is monitored to know it has failed.

**Item 13:** Are exterior cameras needed on the sides of the bus and if so, could one camera on each side of the bus mounted towards the front pointed towards the rear of the bus be sufficient?

**Answer:** Each side camera should be mounted at the front of the coach pointing towards the rear of the bus as illustrated on the Surveillance Camera Schematic Layout attached at Appendix A of this Addendum No. 02.

**Item 14:** Please confirm the services provided by this existing service provider – Icomera that ONTC would like the vendors to integrate with.

**Answer:** Icomera currently provides a cellular modem on each of our coaches. This can be used for Network connectivity of a provided solution. On the Polar Bear Express (PBX), Icomera currently provides a Video Surveillance Solution that can be accessed from the cloud.

**Item 15:** Please provide details of the ITS Strategy and Roadmap alignment requirements.

**Answer:** Ontario Northland has a cloud first approach for any new system or expansion. We also need to ensure we remove as many duplicate services wherever possible (having multiple systems performing the same function is inefficient). Aligning with Icomera aligns with the ITS Strategy and Roadmap as they already provide this service for the PBX (reducing complexity) and their “brain” unit already exists on our busses (this device provides the wireless/entertainment system on all our coaches).

**Item 16:** Please provide details of the make, model, and year of the motor coaches.

**Answer:** Please find attached the Coach Listing at Appendix B of this Addendum No. 02.

**Item 17:** Please provide details including model, current configuration and cabling of existing camera system.

**Answer:** Please find the details below:

Product	Description	Camera Location
TH8H2T0	TH8 DVR, 8 HD Channels, 2 IP Channels, Audio, Security Front Cover with Lock Set, Mounting Plate, Power Harness, 2TB Single HDD	
WT1D20S20G4	TL, TL-HD & TH, Explorer TX8 and HX16 wiring bundle with adapter harness, diagnostic indicator/ alarm button cable 20 ft., five signal input 20 ft., GPS4 receiver magnetic mount 20 ft.	
CHQHD3-MA30	Angle mount shim kit, 30 degree angle, works with CHQ8PD and HD3Q cameras	
HD3Q03A20	HD 1080P Camera, Dome, 2.8mm, internal, audio, IR TDN, 20' harness — to use with DH4C, TH6, TH8, and NH16 DVRs	Front < Rear; Driver < Step; Windshield < Road
HD3Q03A50	HD 1080P Camera, Dome, 2.8mm, internal, audio, IR TDN, 50' harness — to use with DH4C, TH6, TH8, and NH16 DVRs	Mid < Rear
HD3Q03A75	HD 1080P Camera, Dome, 2.8mm, internal, audio, IR TDN, 75' harness — to use with DH4C, TH6, TH8, and NH16 DVRs	Rear < Forward

CA1003EI20	Day/Night 700 TVL camera, exterior (w infrared, no audio), 2.9mm lens, 20 ft. harness	Ext. Curb <Rear
CA1003EI50	Day/Night 700 TVL camera, exterior (w infrared, no audio), 2.9mm lens, 50 ft. harness	Ext. Road <Rear
CA1003EI75	Day/Night 700 TVL camera, exterior (w infrared, no audio), 2.9mm lens, 75 ft. harness	Ext. Reverse
G-SENSOR-EXT	G-Sensor, module and cable kit for compatible DVR	
FRGT-TH8-EG	Freight, FedEx Ground, CE, TH8 System	

**Item 18:** Please provide details of the existing camera and storage systems in use in other services (PBX, rail, Northlander, etc.).

**Answer:** Polar Bear Express (PBX) has an Icomera provided solution with multiple cameras per car, and the solution is reached via a VMS portal. ONTC's Stationary surveillance utilizes Verkada and their cloud environment.

**Item 19:** Please provide detail of the existing networking systems (i.e. provider, number of SIMs, types and quantity of routers/modems, available ports)

**Answer:** Each Coach currently contains an Icomera X6i device with two SIMS (Different Mobility Carrier). An Ethernet port is available on the cellular modem, note it does not have enough ports for cameras.

**Item 20:** Please provide required camera views to configure placement.

**Answer:** Depends on the solution provided. However, ONTC would prefer to use the existing locations as per the schematic diagram.

**Item 21:** Please provide fleet operating days and hours to calculate storage requirements.

**Answer:** ONTC's 41 motor coaches are cycled through our territory to provide revenue service coverage of seven (7) days per week and 365 days per year. ONTC, however, will not be able to provide any data on individual coach operating times.

**Item 22:** Please confirm if the respondent can propose to store the offloaded "cloud video files" for 90 days. If yes, can a lower cost storage be utilized?

**Answer:** Offloaded videos can be stored longer, assuming these are recordings ONTC has requested for review.

**Item 23:** What are DIN rail requirements/min or max size?

**Answer:** ONTC does not have DIN rails on our motor coaches. Our hardware is mounted within an upper luggage bay compartment.

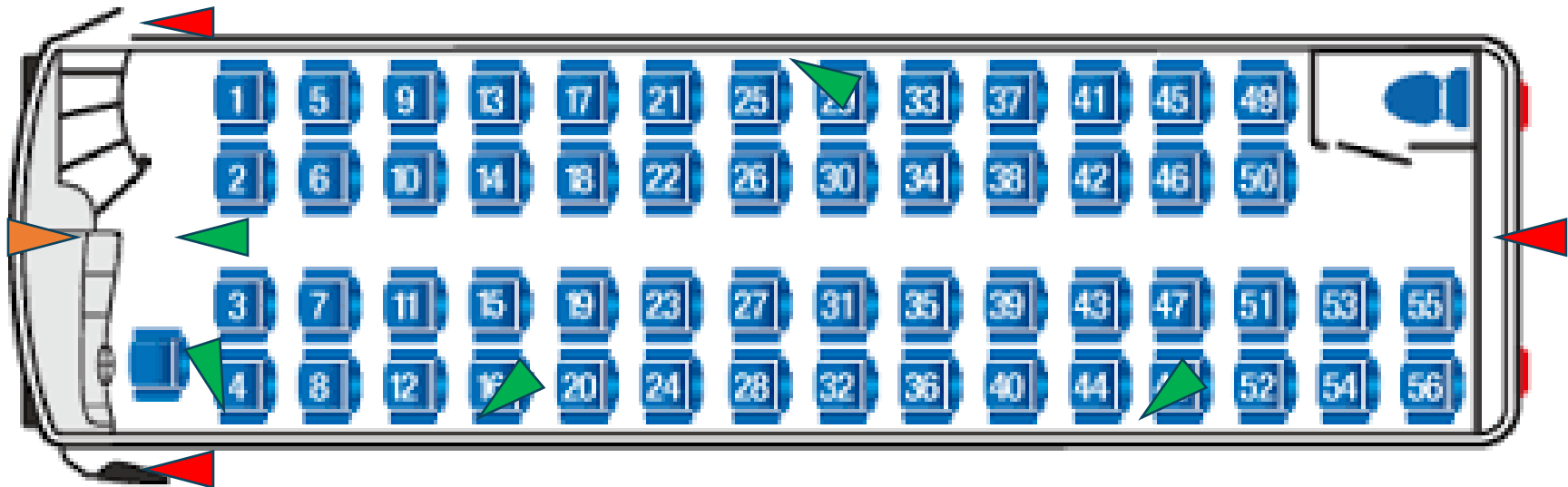
This Addendum hereby forms part of the RFP.

Regards,

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# APPENDIX A

## Surveillance Camera Schematic Layout



Red – Exterior cameras

Orange – Front facing Dash Camera

Green – Interior Cameras

**Note: Camera position may vary from coach to coach depending on seat capacity and location of wheelchair placement.**

# APPENDIX B



ID#	YEAR	MAKE	MODEL
5405	2015	PREV	X3-45
5501	2016	PREV	X3-45
5503	2016	PREV	X3-45
5601	2017	PREV	X3-45
5602	2017	PREV	X3-45
5603	2017	PREV	X3-45
1701	2017	PREV	H3-45
1702	2017	PREV	H3-45
5604	2018	MCI	D4505
5605	2018	MCI	D4505
5606	2018	MCI	D4505
5607	2018	MCI	D4505
5608	2018	MCI	D4505
5609	2018	MCI	D4505
1801	2018	PREV	H3-45
1802	2018	PREV	H3-45
1901	2019	MCI	D4505
1902	2019	MCI	D4505
1903	2019	MCI	D4505
1904	2019	MCI	D4505
1905	2019	MCI	D4505
1906	2019	MCI	D4505
1910	2019	MCI	J3500
1916	2019	PREV	H3-45
1917	2019	TEMSA	TS 45
1918	2019	TEMSA	TS 45
2002	2020	TEMSA	TS 35E
2101	2020	MCI	J4500
2102	2020	MCI	J4500
2103	2020	MCI	J4500
2104	2020	MCI	J4500
2105	2020	MCI	J4500
2106	2020	MCI	J4500
2107	2020	MCI	J4500
2108	2020	MCI	J4500
2301	2024	TEMSA	TS-45
2302	2024	TEMSA	TS-45
2401	2025	TEMSA	TS-45
2402	2025	TEMSA	TS-45
2403	2025	TEMSA	TS-45
2404	2025	TEMSA	TS-45