

Coordinating with TP, TW and Other External Agencies

ITSO/OCC/SOP/NOP02.008	Coordinating with TP, TW and Other External Agencies
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DOCUMENT CONTROL

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AMENDMENT HISTORY RECORD

Rev No.	Effective Date of Change	Section & Sub- Section Amended	Amendments/ References	Party Requesting for Change
1	XX Oct 2013	Whole Document	Due to organization change of division name from ITSC to ITSO.	DOM, ITSO OCC
2	XX Dec 2020	Whole Document	Due to change of Staff Designations in ITSO OCC. Delete SOE, insert DM Delete DySOE, insert DyAM.	Mgr, ITSO OCC

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Section 1. Description

1.1.1 This document describes the coordination protocol for work processes with stakeholder agencies that is not documented in other procedures of the ITSO operations manual. These stakeholder agencies have vested interest in ITSO road operations or at times may require the expertise assistance or resources that ITSO can provide.

1.1.2 The agencies in this document have either a daily or special working with ITSO. Although agencies described in this document may be extensive but it is not exhaustive this is because there are other agencies that work with ITSO only on rare ad hoc basis that are not included.

1.1.3 These stakeholder agencies can be classified as internal agencies and external agencies.

Section 2. Personnel Involved

2.1.1 All ITSO OCC operations staff

2.1.2 Other Agencies staff.

Section 3. Process

Sub-section 3.1 Internal Agencies.

3.1.1 Internal agencies are identified mainly LTA department. These departments can be from the ROCP group, other LTA group whose work may affect road operations or outsource contractors who are contracted by LTA to be part of ITSO operations e.g. AETOS LTM & CERTIS CISCO VRS.

3.1.2 Most of the work coordination protocols for internal agencies are spelt out in other procedures of the ITSO OCC operations manual. These agencies have a close working operational relationship with ITSO OCC that either involves daily normal operations or abnormal & emergency operations.

3.1.3 Details of work process protocols can be found in the respective procedure document of “NOP 02-Normal daily operations”, “AOP- 03 - Abnormal operations & Special requirement” and “EOP- 04 -Emergency Crisis Operations.”

Sub-section 3.2 External Agencies

3.2.1 There are numerous external agencies that work with ITSO OCC with regards to road operations.

3.2.2 However, the agencies that work closely with ITSO can be identified as follows:

- (a) Traffic Police (TP)
- (b) Broadcasting Media (Traffic Watch)
- (c) Singapore Civil Defence Force (SCDF) & Singapore Police Force (SPF)
- (d) National Environmental Agency (NEA)
- (e) National Parks Board (Nparks)
- (f) Public Utilities Board Drainage Department (PUB DD)
- (g) Public Bus Operators (SBS Transit & SMRT)

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3.2.3 Traffic Police main role when working with ITSO OCC can be identified as follows:

- a) To inform ITSO on any reported incident
- b) To inform SCDF for assistance if necessary
- c) To deploy police personnel to manage incident site and diversion of affected traffic.
- d) To inform ITSO for temporary diversion, e.g. an access will be closed for a prolonged period, extensive repair works, etc
- e) As a source of traffic information for both arterial road and expressway incident for ITSO OCC.

3.2.4 Traffic police working process and protocols can be found in the respective procedure document of “NOP - 02 -Normal daily operations”, “ AOP- 03 - Abnormal operations & Special requirement” and “EOP- 04 - Emergency Crisis Operations”. The mode of communication to TP is via phone or fax.

3.2.5 Broadcasting Media (Traffic Watch) main role when working with ITSO OCC can be broadly categorized as both a disseminator of traffic information as generated by ITSO OCC or reports from the public and also as an additional source of information for ITSO OCC.

3.2.6 SCDF & SPF are additional resources that ITSO OCC can mobilize when needed via Traffic Police. However, in time of extreme emergency or crisis ITSO OCC may contact these agencies direct.

3.2.7 National Environment Agency (NEA) deals mainly with environmental issues e.g. rubbish spillage on the expressways and enforcement action against vehicles emitting too much exhaust smoke. ITSO can contact the NEA hotline for assistance.

3.2.8 National Park (Nparks) deals mainly with plants and trees issue. These include removal of fallen tree and landslide. ITSO can contact Nparks hotline for assistance.

3.2.9 Public Utilities Board Drainage Department (PUB DD) deals mainly with flooding and water ponding on roads. This work process in details can be found in the Section 4, Special Workings of this document.

3.2.10 Public Bus Operators, ITSO OCC mainly informs them if any of their buses are reported to have broken down or involved in any incident. Also, ITSO OCC shall inform LTOC to inform the Public bus operators of any ad-hoc emergency closure of roads.

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Section 4. Special Workings

Sub-section 4.1 Special Workings Description

4.1.1 This section will deal with work protocols or processes that are not documented in any other procedures.

Sub-section 4.2 Access of ITSO Unified Closed-Circuit Monitoring System (UCCMS) CCTV capabilities by Singapore Police Force.

4.2.1 Access is given to authorized officers and employees of MHA and SPF for the purpose of counter-terrorism and other public order / security incidents that may arise.

4.2.2 This is to guide both LTA and SPF operators and their supervisors on the following, Command and control of ITSO cameras and images, imposing “blackout” of video images to third parties and Maintenance of SPF systems located at the ITSO Control Room.

4.2.3 LTA will allow SPF to control and view images from any of the cameras in the EMAS and J-Eyes network. SPF can only select up to 8 J-Eyes cameras for control and up to 24 J-Eyes cameras for viewing. For EMAS camera SPF can control and view up to 64 EMAS cameras. LTA will retain the control of the views captured by all the cameras.

4.2.4 Situations whereby SPF will request to take over the control of the cameras (i.e. to control the images captured by the camera):

(i) Routine operations in Operations Room

In the event that SPF needs to take over the control of any of the cameras during routine operations, SPF will seek LTA's permission by calling ITSO Control Room at <6332 6945>. The liaison officers for routine operations will be Duty Radio Officer, Operations Department and the Camera operator (Officer to identify himself)

(ii) Adhoc request by SPF for its special operations or a planned event

In the event that SPF needs to take over the control of any of the cameras for its special operation or planned event on an adhoc basis, SPF will seek LTA's permission by writing to the following email address ITSO_OCC@lta.gov.sg, at least 5 working days in advance. (This email account would be manned at all times). To ensure that requests are not missed, SPF will follow up on the request by calling ITSO Control Room at <6332 6945>. Depending on the exigency of incidents, the call may be made before sending an email of confirmation. During SPF's Operation, and when the Command Post is set-up, SPF liaison officers will be, Assistant Director, Operations Planning, Operations Department (AD/OP), Assistant Director, Policy & Development, Operations Department (AD/OP & D)

4.2.5 At LTA's end, the officers authorised to give consent for special operations or planned event are as follows, Manager (ITSO OCC) and DDIT (Deputy Director, Intelligent Transport System Operations).

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4.2.6 When LTA needs to regain control of these cameras, LTA will inform SPF before doing so by calling the SPF Operations Room, Duty Radio Officer (DRO) at <6478 4639>.

4.2.7 In the event that there is a need by SPF to impose a “blackout” on any of the third parties that have been given rights by LTA to broadcast or utilize these images, SPF will email the request to LTA at ITSO_OCC@lta.gov.sg, followed by a telephone call to ITSO Control Room at 6332 6945, indicating the 3rd party and camera IDs to be blanked out. Depending on the exigency of incidents, the call may be made before sending an email of confirmation.

4.2.8 As the current system does not allow for selective images to be “blackened out” immediately, LTA will have to first impose a “blackout” of all the EMAS and J-Eyes camera images on the other parties. ITSO Control Room will also inform the affected parties of the “blackout”.

4.2.9 Thereafter, ITSO will implement the selective “blackout” of the affected camera images. The lead time to implement selective “blackout” of camera images by LTA is 2 hours after receiving the information from SPF on the location of cameras.

4.2.10 Similarly, for full restoration of image transmission to the affected parties, SPF shall inform ITSO Control Room via email, followed by a phone call. A lead time of 2 hours is needed for the restoration upon notification.

4.2.11 With respect to the above, the following SPF officers will liaise with LTA on the implementation of the “blackout”.

- a) Assistant Director, Operations Planning, Operations Department (AD/OP)
- b) Assistant Director, Policy & Development, Operations Department (AD/OP & D)

4.2.12 For the purpose of conducting routine maintenance of SPF systems at ITSO Control Room, SPF will inform LTA of the need to do such works at least seven working days in advance.

4.2.13 LTA will update SPF on the installation of new or removal of old cameras that may affect the smooth operation of the system. This will enable SPF to update its list of camera locations.

4.2.14 LTA will facilitate the access of SPF’s contractor into LTA’s ITSO Control Room premises to conduct routine maintenance on SPF systems installed there. SPF’s contractor will follow the clearance procedures as stipulated by LTA e.g. SPF will ensure that the contractor provides LTA with the necessary identification details¹ of its workers who are required to enter and work in LTA’s premise to carry out such maintenance works.

4.2.15 LTA reserves the right to review the SOP as and when it deemed necessary

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Sub-section 4.3 Piping of Images from ITSO OCC to Mindef HQ

4.3.1 LTA has agreed to allow Mindef access to ITSO Unified Closed-Circuit Monitoring System (UCCMS) CCTV via the piping of camera images to Mindef HQ. This access is given to the officers and employees of Mindef for the purpose of counter-terrorism and other public order / security incidents that may arise.

4.3.2 This document will guide both LTA and Mindef operators and their supervisors on the command and control of cameras and images.

4.3.3 LTA will allow Mindef to view images from any of the cameras in the EMAS and J-Eyes network. However, LTA will retain the control of the views captured by all the cameras.

4.3.4 In the event that Mindef would like to take over the controls of any of the cameras (i.e. to control the images captured by the camera), Mindef would have to seek LTA's permission by writing to the following email addresses ITSO_OCC@lta.gov.sg (this email account would be manned at all times). LTA would release the controls of these cameras to Mindef if LTA does not need them at the time of the request. To ensure that requests are not missed out, Mindef may follow up on the email request by calling the following telephone number 6332 6945.

4.3.5 Only Mindef officers holding the following designations may make this request.

- a) SO Systems, Army Command System Group
- b) Planning Officer, Current Operations 2 Branch, GS(Operations)
- c) Readiness Officer, General Staff Command Centre, GS(Operations)

4.3.6 At LTA's end, the officers authorised to give consent are as follows, Manager (ITSO OCC) & DDIT (Deputy Director, Intelligent Transport System Operations)

4.3.7 LTA reserves the right to review and a the documents as and when it deemed necessary

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Sub-section 4.4 Workings with PUB

4.4.1 This work process describes any flooding on roads be it spotted by LTA's cameras and also for the requests by CW Dept for LTA's cameras to capture and record the situation in any event of flood. At the same time, PUB site officers shall provide information on the traffic condition to ITSO control centre.

4.4.2 Two situations are envisaged:-

- (a) Isolated flooding; and
- (b) Widespread flooding.

4.4.3 In the event of LTA spotting any incident of flooding on the road on its cameras, LTA staff would call up PUB CW Dept contact during office-hour. After office-hour, LTA staff would call CW Dept's officer in the following order* PUB Hotline and the CW department. If necessary, CW Dept would call LTA to pick up the recording.

4.4.4 The list of locations with a history of flooding that can be viewed by LTA's cameras are given in Attachment 1. Should CW Dept be informed of flooding at a location that can be viewed by LTA's cameras, CW Dept would call LTA's, ITSO OCC DM and request for snapshots or video recording of the situation. CW Dept would request LTA to send the snapshots via e-mail or if necessary, arrange with LTA to pick up the recording. If the flooding warranted a public advisory to be issued, LTA after consulting with CW Dept, would flash the advisory via their electronic signboard.

4.4.5 In the event of very heavy storm causing high flow levels in rivers and canals and flooding in more than 2 locations, CW Dept would call LTA's ITSO to request for information pertaining to the severity of the flood. CW Dept may also request for recording of views of interest and may also send a member of its staff (Attachment 2) to the ITSO so that CW Dept can co-ordinate closely with LTA to get the real time information and record the information on the flooding.

4.4.6 PUB site officers, upon arriving at the flooding scene, shall provide ITSO OCC (by calling ITSO Duty Officer) with information on the traffic congestion and incidents, if any, with particular attention to locations near to traffic junctions.

4.4.7 In the event that LTA cannot immediately contact the officers from CW Department as listed above, LTA can call the hotline at **1800-284 6600** or email to PUBOne@singnet.com.sg or feedback at website <http://www.pub.gov.sg/cindy/Pub-One.htm>.

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Sub-section 4.5 External Agencies Visitors to ITSO OCC.

4.5.1 Documents the process of external agencies visitors to ITSO OCC mostly for the purpose for use of the CCTV.

4.5.2 If a request for visitors to come to ITSO OCC for a specific purpose is received from the backroom staff or the management and all the required arrangement has been made. ITSO OCC DM shall accommodate the visitor(s) as long as operations or security is not compromised. Visitor(s) shall sign in on the OCC visitor's book.

4.5.3 Should the request come direct via the telephone ITSO OCC, DM shall forward the call request to Manager (ITSO OCC).

Sub-section 4.6 External Agencies Request For Video Footages.

4.6.1 All requests for downloading of video footages shall be directed to the respective engineering officers from Ops and planning.

4.6.2 Requests shall follow the flow chart in Attachment 3

Section 5. Abbreviations

DO	Deployment Officer
ITSO	Intelligent Transport Systems Operations
EMAS	Expressway Monitoring Advisory Service
LTA	Land Transport Authority
LTM	Land Transport Authority Traffic Marshals
LTOC	Land Transport Operations Control
NEA	National Environment Agency
Nparks	National Parks
OE	Operations Executive
OCC	Operations Control Center
PTZ	Pan Tilt Zoom Camera
PUB	Public Utilities Board
RC	Recovery Crew
RAM	Road Asset Maintenance
DM	Deputy Manager
SPF	Singapore Police Force
SCDF	Singapore Civil Defense Force
TM	Traffic Management
TP	Traffic Police
VRS	Vehicle Recovery Service
VMS	Variable Message Signs

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Section 6 References & Attachments

1. Intelligent Transport Systems Operations (Operations), Integrated Standard Operating Procedure
2. Standard Operating Procedure (SOP) Piping of images from LTA ITSO control room to SPF HQ
3. Joint Standard Operating Procedures (SOP) for sharing of real time information from LTA's ITSO cameras with CW Department (PUB) in the event of floods.

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ATTACHMENT 1 List of Cameras that can monitor sites with past flooding/ponding incidents

LOC	Camera No	Location	Remarks
CTE	CTE 921	Sg Whampoa/ May PRAMary School	We can view the water level in Sg Whampoa
	CTE 916	At CTE 6.6 Km, Norfolk Road	Can check whether the culvert across Norfolk Road overflows the road
	CTE 927	Kallang River beside DelGro workshop	We can view the water level in Kallang river and also the ponding problem at CTE
	CTE 928	Braddell Road junction fronting SBS Depot	We can view the water level in Kallang river and also THE ponding problem at slip road from Braddell Road To CTE due to undersize drain
	CTE 932	CTE/Ang Mo Kio Ave 1	Ponding due to choked centre median drain
	CTE 935	CTE/Ang Mo Kio Ave 3	Ponding due to high side table
	CTE 938	Exit from Ang Mo Kio Ave 5 to CTE toward SLE	Ponding due to high side table
PIE	PIE <E> 5997	At PIE 14.2km, PIE slip road exit to Upper Serangoon Road	Ponding at Woodsville flyover due to high side table
	PIE<E> 5988	At PIE 11.2km, Upper Paya Lebar slip road exit to PIE(east bound)	Ponding problem at slip road due to high side table
	PIE<E> 5975	At 71/2KmPIE below	Ponding problem caused by choked centre median drain
	PIE<E> 5977	Bedok North Flyover	Ponding problem caused by choked centre median drain
	PIE<E> 5970	At PIE 6Km, Bedok Canal	Ponding problem caused by choked centre median drain
ECP	ECP 3978	ECP slip road & ECP service road junction near Marine Parade Flyover	Ponding along service road due to high side table
	ECP 3970	Siglap Canal	We can view the water level in Siglap Canal at ECP
	ECP 3959	Bedok Canal – ECP 4.0Km	We can view the water level in Bedok Canal at ECP

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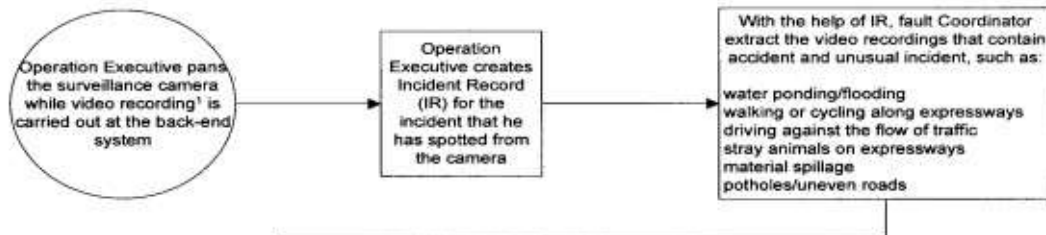
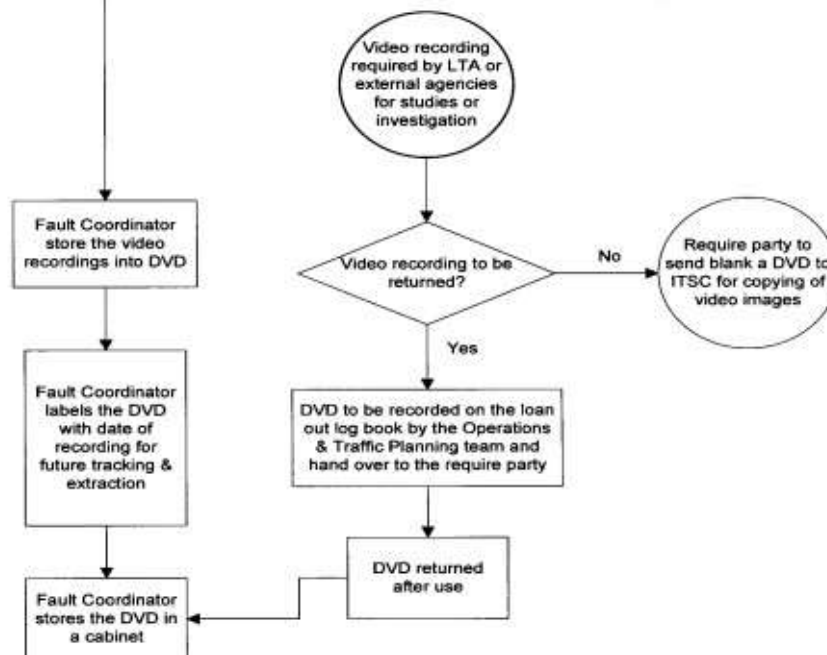
ATTACHMENT 2 - PUB Contact List

Department	Name of Officer	Tel No.	Hp/Office No.	E-mail Address
CW Department (List 1)	1. Office-Hour Hydro Hotline Mr Choy Wai Kwong Mr Yeo Boon Leng Mr Loo Huat Seng Mr Daniel Ong Mr Hood Bin Nor Mr Alan Ong Mr Mohan	- 67313409 67313401 67313426 67313427 67313417 67313451 67313072	94743874 (hp) 96329822 (hp) 97358551 (hp) 97832563 (hp) 98804968 (hp) 98968486 (hp) 97482272 (hp) 96422385 (hp)	- Wai Kwong CHOY/PUB/SINGOV Boon Leong YEO/PUB/SINGOV Huat Seng LOO/PUB/SINGOV Daniel ONG/PUB/SINGOV Hood NOR/PUB/SINGOV Cheng Khoon ONG/PUB/SINGOV Mohan SUPPIAH/PUB/SINGOV
CW Department (List 2)	(Officers authorized to go down to ITSO for assistance with cameras) Hanafi Hanif Yusof Bin Umar Koh Guat Leng (Ms) Anyzarina (Ms) Aw Kwong Yew Tan Soon Hock Hassan Ali Liew Chin Loon Lim Chun Seng Govindasamy Goh Hearn	(Identity Card nos. for verifications) S1178933A S1314486I S1380635G S1334637B S1276027B S1109310H S0065112E S1114413F S0872462H S0203241D S1737292J	92334315 (hp) 92334291 (hp) 67313487 (off) 67313488 (off) 98398157 (hp) 97589433 (hp) 92334294 (hp) 92334310 (hp) 92334328 (hp) 92334327 (hp) 92334349 (hp)	Hanafi HANIF/PUB/SINGOV Yusof UMAR/PUB/SINGOV Guat Leng KOH/PUB/SINGOV Anyzarina TASJUDIN/PUB/SINGOV Kwong Yew AW/PUB/SINGOV Soon Hock Tan/PUB/SINGOV Hassan ALI/PUB/SINGOV Chin Loon LIEW/PUB/SINGOV Chun Seng LIM/PUB/SINGOV Govindasamy/PUB/SINGOV Hearn GOH/PUB/SINGOV

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ATTACHMENT 3- DVR RETENTION WORK FLOW

Handling of Ad-hoc Digital Video Recording
(after Video Cassette Recording is replaced by DVR)

Recording Stage**Storing Stage****Disposal Stage (3 Years after the video recording date)**

Video images are continuously recorded wherever the cameras are pointing to.

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