HITACHI
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A Hitachi Group Company

臺北捷運環狀線（第一階段）

機電系統工程、軌道工程、自動收費系統工程

TAIPEI CIRCULAR LINE (PHASE 1)

E&M SYSTEM, TRACK WORKS, AFC SYSTEM

CF610/CF611/CF617

附件九

細部設計文件歷次內部修正記錄表及歷次審查意見回覆表彙整

APPENDIX 9

DETAILED DESIGN SUBMITTALS INTERNAL REVISION HISTORY AND REVIEW COMMENTS REPLIES SUMMARY

表單編碼：TPOS-EMA2-61-R00

Metro Taipei Circular Line		
AB-ASTS Consortium		
Incoming date: Dec 30, 2013		
Protocol No: 2705801		
	Distrib	Action
PD	✓	
PPD	✓	
Contract Mg		
Project Control		
Administration		
QM		
H&SM		
SPE	✓	Leslie
CM		
Supply Chain Management		
Others	✓	
SIG		

臺北市政府捷運工程局機電系統工程處

送審文件審查意見回覆表
Submittal Review Transmittal

Due Days:
☐7 days ☑20 days ☐_____days ☐NA

日　　期 DATE　　：DEC 30 2013
來文文號 YOUR REF.：20-05304
發文文號 OUR REF.：YM-102T-11084-00
技術文件編號 CIN.NO：YM-CF6105-0051-F

受文者　(TO)　：AnsaldoBreda S.p.A 及 Ansaldo STS S.p.A 共同承攬
發文者　(FROM)　：台北市政府捷運工程局機電系統工程處
主　旨　(SUBJECT)：環狀線 CF610 標通訊系統 TC1-67201-F 通訊多功能操作台細部設計 F 版

審查結果(RESPONSE)：

1.核准等級(NOTATION)：
核准等級 1(NOTATION 1)：■　　核准等級 2(NOTATION 2)：☐
核准等級 3(NOTATION 3)：☐　　核准等級 4(NOTATION 4)：☐
其他 (OTHERS)_____：☐

2.審查意見(ATTACHED PLEASE FIND REVIEW COMMENTS ,TOTAL SHEETS　　)共　頁(如附件)
3.請依據審查意見修訂後重新送審(PLEASE TAKE PROPER ACTION AND RE-SUBMIT),
是(YES)☐,否(NO)■

工 程 司

副本抄送(CC)：

土木建築設計處	☐	機電系統設計處	■	工務管理處	☐
機工處計管科	☐	機工處物管科	☐	機工處設備科	☐
機工處系統科	☐	機工處車輛所	☐	機工處號誌所	☐
機工處供電所	☐	機工處通訊所	☐	機工處電扶梯所	☐
機工處自動收費所	☐	機工處系統一所	■	機工處總工程司室	☐
中運量	☐	捷運公司	■	品保處	☐
機工處型管	☐	中區工程處	☐		

(備註：副本抄送於單位名稱前加註＊表示不含附件，沒有＊符號表示含附件)

內部修正紀錄表
INTERNAL AMENDMENT LIST

編製 Prepared (PE)	校核 Checked (SPE)	複核 Approved (QM)	核准 Authorized (PD)	說明 Description	日期 Date	版次 Revision
A. Chen	D. Villa	J. Shiung	G. Barone	發行核定版 Release approval version (YM-102T-11084-00)	APR 24, 2014	06
A. Chen	D. Villa	B. Chen	G. Barone	依業主審查意見更新 Revised to response client's comments (YM-102T-08011-00)	NOV 15, 2013	05
A. Chen	D. Villa	B. Chen	G. Barone	依業主審查意見更新 Revised to response client's comments (YM-102T-05078-00)	JUL 26, 2013	04
A. Chen	D. Villa	B. Chen	G. Barone	依業主審查意見更新 Revised to response client's comments (YM-102T-01009-00)	APR 04, 2013	03
A. Chen	D. Villa	B. Chen	G. Barone	依業主審查意見更新 Revised in response to client's comments (YM-101T-04051-00)	JAN 02, 2013	02
L. Liao	D. Villa	B. Chen	G. Barone	依業主審查意見更新 Revised in response to client's comments (YM-100T-06192-00)	APR 24, 2012	01
L. Liao	D. Villa	B. Chen	R. Bruce	初次發行 First issue	NOV 09, 2011	00

文件審查意見回覆表
RESPONSE REVIEW TRANSMITTAL

F	**SEMPO**	**YM-102T-08011-00**	**DEC 30, 2013**	**Notation 1**
E	**SEMPO**	**YM-102T-08011-00**	**SEP 10, 2013**	**Notation 2**
D	**SEMPO**	**YM-102T-05078-00**	**JUL 03, 2013**	**Notation 2**
C	**SEMPO**	**YM-102T-01009-00**	**FEB 25, 2013**	**Notation 2**
B	**SEMPO**	**YM-101T-04051-00**	**MAY 31, 2012**	**Notation 2**
A	**SEMPO**	**YM-100T-06192-00**	**DEC 20, 2011**	**Notation 3**
版次 Revision	審查單位 Issuer	審查文號 Issuer's SRT Reference	審查日期 Date Issued	審查狀況 Status of Approval

項次 No	圖說/章節/項次 Drawing/ Chapter/ Item	審查意見 Review Comments	答覆 Reply Answer
1	無 N/A	無 N/A	無 N/A

文件審查意見回覆表
RESPONSE REVIEW TRANSMITTAL

E	**SEMPO**	**YM-102T-08011-00**	**SEP 10, 2013**	**Notation 2**
D	**SEMPO**	**YM-102T-05078-00**	**JUL 03, 2013**	**Notation 2**
C	**SEMPO**	**YM-102T-01009-00**	**FEB 25, 2013**	**Notation 2**
B	**SEMPO**	**YM-101T-04051-00**	**MAY 31, 2012**	**Notation 2**
A	**SEMPO**	**YM-100T-06192-00**	**DEC 20, 2011**	**Notation 3**
版次 Revision	審查單位 Issuer	審查文號 Issuer's SRT Reference	審查日期 Date Issued	審查狀況 Status of Approval

項次 No	圖說/章節/項次 Drawing/ Chapter/ Item	審查意見 Review Comments	答覆 Reply Answer
E1	GEN	2.2.1(1)/2.2.1.1/2.3.1.1 等等章節，「由行控中心播出外線」請更爲「由行控中心播出去電」，以免與一般播打自動電話外線有所混淆。 In following chapters 2.1.1(1)/2.2.1.1/2.3.1.1, please change "由行控中心播出外線" to"行控中心播出去電" to avoid confuse the call of DLT and AT.	依要求修正。 中文描述「由行控中心播出外線」修改爲「由行控中心播出去電」。 Modifie chinese description according to the requirement. Change the Chinese description form"由行控中心播出外線" to"行控中心播出去電".
E2	P145	表 2-6 與各子系統警報介面清單請增加 Clock 系統當 GPS 與 Master Clock 之間斷訊時之告警。同時修正圖 2-52。 In table 2-6, please add a subsystem alarm interface for Clock system to provide the disconnection alarm between GPS and Master clock. And update figure 2-52 also.	表 2-6 與各子系統警報介面清單與圖 2-52 的系統警報架構，加入時鐘系統。 GPS 與 Master Clock 連線狀態偵測屬時鐘系統範疇，本文僅釐清 CMFT 與時鐘系統之警報介面；此告警已描述於 TC1-66201 時鐘系統 - 細部設計 6.4 設備告警。 Table2-6 Alarm Interface List with Subsystems and figure 2-52 System Alarm Architecture add Clock system. The connection status between GPS and Master Clock is the scope of Clock System. This document descripe the alarm interface between CMFT and Clock System. The detailed description of this alarm please refer to TC1-66201 Clock System – Detailed Design 6.4 Device Alarm.
E3	SECT 2.3.4.1 ATS 列車訊息顯示 PAGE120 SECT 2.3.4.1	CMFT 伺服器接收 ATS 訊息：請詳細說明 ATS 提供予 CMFT 之訊息爲何？ CMFT 伺服器傳送 ACK 訊息給 ATS：請詳細說明所傳送的 ACK 訊息種類及內容？	ATS 提供以下訊息封包送至 CMFT, 主要爲: a) 列車資訊 b) 月台到站資訊(由 ATS 運算)

項次 No	圖說/章節/項次 Drawing/ Chapter/ Item	審查意見 Review Comments	答覆 Reply Answer
		CMFT 伺服器解析 ATS 資訊內容，從而得知車站位置（上行、下行），顯示位置（月台、大廳）及顯示訊息內容：請再詳敘，除車站位置（上行、下行），顯示位置（月台、大廳）訊息外，對於列車到、站訊息顯示（包含抵達時間精確），其運算邏輯爲何？是否仍由 CMFT 伺服器執行及解析，並進而傳送至各車站點矩陣顯示器控制單元 DCU 顯示，或經由各車站 DCU 向 CMFT 伺服器索取所需顯示的訊息？ 請就 CMFT 與 ATS 兩者間存在的界面，於相互取得完整關聯性及資訊內容後，詳述兩者資料傳遞與接收種類、內容，描繪資料流基礎架構，並詳加敘述於列車到、離站訊息顯示上，CMFT、ATS、DCU 三者分工角色。 CMFT server received ATS information message: please detail descript about what message CMFT will receive from ATS? CMFT server send ACK message to ATS: please detail descript about the ACK message type and content. CMFT server analyzes the contents of the ATS message, and obtains the information about direction (up or down), location to display (platform or concourse) and content of message: please detail descript about the logical of this analyze procedure? Is CMFT server process the decode part and then send the display message to DCU to display the message? Or DCU in stations will request the display message from CMFT? Please detail descript the type and contents of messages in the interface between CMFT and ATS and draws the basis data flow chart and descript the relationship between CMFT, ATS and DCU of displaying message of the train arriving and departure.	c) 列車到離站資訊 d) ATS ACK 訊息 e) Health Check f) 列車位置資訊 以上 a), b), c) 訊息封包爲事件驅動訊息 (Event-Driven) 其中 b)訊息如無內容變更則 30 秒再更新一次，而 e), f) 訊息則爲持續傳送。 當 CMFT 收到 ATS 訊息時，會檢查封包是否完整，並回覆 ATS 收到或者要求 ATS 重傳，主要回覆: - 列車資料更新請求 - 月台到站資料更新請求 - CMFT ACK 訊息 CMFT 無須執行任何解析並直接轉送 ATS 訊息封包至相關車站之 DCU 系統，。並由 DCU 依所得到的預計到站時刻與實際時間比對後來判斷大廳與月台的顯示內容 ATS provide following information packet to CMFT, which are: a) Train Information b) Platform Arrival Information (Estimated by ATS) c) Train Arriving / Leaving Information d) ATS Acknowledge Message. e) Health Check Message f) Train Location Information Message a), b) and c) will be event-driven basis and b) will update every 30s if no event, other message e) and f) are continuous basis. When CMFT received ATS message, CMFT will check the completeness of ATS package, then acknowledge ATS the transfer is completed or ask to resend the message and those are: - Train Update Request - Platform update Request - Acknowledge Message CMFT will forward the ATS message packet to DCU in relevant station

項次 No	圖說/章節/項次 Drawing/ Chapter/ Item	審查意見 Review Comments	答覆 Reply Answer
			without any analysis of contents. The DCU will show display of platform and concrouse according to comparision of current time and estimated arrival time from ATS. 修正 SECT2.3.4.1 流程。DMD 停靠站訊息是由 DCU 自行解析，CMFT 僅轉發 ATS 訊息給各車站的 DCU，CMFT 不做任何停靠站到離站時間等的邏輯運算。 Modified the flow diagram of SECT 2.3.4.1. DMD display train stops message according to the ATS message which DCU received from CMFT. And CMFT only transfer the ATS message from ATS to DCU, CMFT do not process logical calculate about train stops information for DCU.
E4	SECT 2.3.2.5 P106	2 台或以上的列車觸發「連動監看」事件，畫面除輪播外，請增加指定列車及螢幕之功能，例如列車 A 於螢幕 1、列車 B 於螢幕 2。 If more than 2 trains trigger on-train interlocking monitor event, besides carousel display mode, please make operator can assign the train and display monitor. E.g. Train A display on monitor 1 and train B display on monitor2.	2 台或以上的列車觸發「連動監看」事件，畫面除輪播外，已增加指定列車及螢幕功能，操作員可以指定顯示螢幕 1 與螢幕 2 的列車影像，從螢幕的輪播事件清單中選擇。 已補充列車觸發事件的顯示與移除方式，詳見本文 2.3.2.5 節，節錄如下：“在列車觸發連動監看時，操作員可以從列車觸發事件清單中，選擇事件來檢視影像，以及將事件從事件清單中解除。” If more than 2 trains trigger on-train interlocking monitor event, besides carousel display mode operator can assign the train and display monitor. Operator can choose the display image of monitor1 and monitor 2 form the train events list. The display and remove function of train interlocking event are add into this document. Please refer to 2.3.2.5, excerpts below: “When on-train interlocking monitor triggered, operator can select the video or remove the event from on-train triggered event list.”
E5	SECT 2.3.5.4 P131	旅客緊急通訊廣播流程說明缺少有駕駛員在列車上啓動通訊控制盤的情況。 Passenger emergency intercom data flow diagram lack the situation of driver active the TRCP on train.	非 CMFT 範圍；駕駛員在車上啓用通訊控制盤的流程，於 TC1-6A201 列車通訊系統 – 細部設計 3.3 旅客緊急對講機中有詳細說明。

項次 No	圖說/章節/項次 Drawing/ Chapter/ Item	審查意見 Review Comments	答覆 Reply Answer
			This is not scope of CMFT, the data flow diagram of driver active the TRCP on train please refer to TCI-6A201 ON TRAIN COMMUNICATION SYSTEM - DETAILED DESIGN 3.3 Passenger (Emergency) Intercom.
E6	PAGE 23~25	2.2.1.2 行控中心接聽來電不應 OCC 所有席位電話響鈴，應依直線電話所在位置接通不同席位，如：機廠內時直線電話拿起後，僅限機廠席位響鈴及接聽，其他席位不會響，避免互相干擾及影響主線電話接聽。 2.2.1.2 Receiving incoming call at OCC should be according to the calling DLT location to connect to related console. E.g. when DLT in depot picked up, only depot console ringing and the other consoles don't to avoid interference and affect the answer of main line incoming call.	直線電話已配置 CMFT 主控台席位直線電話機的接聽區域，當責任區域內的直線電話來電時，僅有配置的 CMFT 席位的話機會響鈴。如：機廠內時直線電話拿起後，僅限機廠席位響鈴及接聽，其他席位不會響。 倘若指定席位忙線或無法接聽時，此來電將轉入等候佇列中，只有在佇列中有等候接聽來電時，所有席位會同時響鈴。 直線電話的呼叫流程請參考 TC1-62206 直線電話系統 – 系統軟體 3.2.1.1 直線電話呼叫流程。 CMFT 僅顯示主控台直線電話話機的通訊狀態。 DLT system will allocate the responsibility area for DLT telephone set of CMFT console. Only specific DLT phone set of CMFT console will ring the ringback tone while the call coming from its responsibility area. E.g. when DLT in depot picked up, only depot console ringing. If the default telephone is busy or no-answer state, this call will be transferred to the queue of waiting calls. And if the queue is not empty, all DLT telephone of CMFT consoles will ringing to wait for answering. The call flow of DLT phone set pleae refer to TC1-62206 DIRECT LINE TELEPHONE SYSTEM – SYSTEM SOFTWARE 3.2.1.1 Direct Line Telephone Call Flow. CMFT shows the phone set status of DLT telephone.
E7	PAGE 26~28	2.2.1.3 忙線時來電不應 OCC 所有席位電話響鈴，應依直線電話所在位置接通不同席位，如：機廠內時直線電話拿起後，僅限機廠席位響鈴及接聽，其他席位不會響，避免互相干擾及影響主線電話接聽。 2.2.1.3 Receive call when busy at OCC should be according to the	直線電話已配置 CMFT 主控台席位直線電話機的接聽區域，當責任區域內的直線電話來電時，僅有配置的 CMFT 席位的話機會響鈴。如：機廠內時直線電話拿起後，僅限機廠席位響鈴及接聽，其他席位不會響。 倘若指定席位忙線或無法接聽時，此來

項次 No	圖說/章節/項次 Drawing/ Chapter/ Item	審查意見 Review Comments	答覆 Reply Answer
		calling DLT location to connect to related console. E.g. when DLT in depot picked up, only depot console ringing and the other consoles don't to avoid interference and affect the answer of main line incoming call.	電將轉入等候佇列中，只有在佇列中有等候接聽來電時，所有席位會同時響鈴。 直線電話的呼叫流程請參考 TC1-62206 直線電話系統 – 系統軟體 3.2.1.1 直線電話呼叫流程。 CMFT 僅顯示主控台直線電話話機的通訊狀態。 DLT system will allocate the responsibility area for DLT telephon set of CMFT console. Only specific DLT phone set of CMFT console will ring the ringback tone while the call coming from its responsibility area. E.g. when DLT in depot picked up, only depot console ringing. If the default telephone is busy or no-answer state, this call will be transferred to the queue of waiting calls. And if the queue is not empty, all DLT telephone of CMFT consoles will ringing to wait for answering. The call flow of DLT phone set pleae refer to TC1-62206 DIRECT LINE TELEPHONE SYSTEM – SYSTEM SOFTWARE 3.2.1.1 Direct Line Telephone Call Flow. CMFT shows the phone set status of DLT telephone.
E8	PAGE 67~70	2.2.5.3 服務對講機通訊章節中提及，當列車於手動駕駛模式時，駕駛員可要求與行控中心通訊...。 a. 建請不僅限於手動假使模式時方可使用。 b. 機廠區列車服務對講機僅限機廠席位響鈴及接聽，避免互相干擾及影響主線電話接聽。 c. 通話過程應以全雙工進行。 2.2.5.3 In service intercom chapter, "When the train is on manual driving mode, the driver may request intercom with OCC…" a. Please do not limitation this function only activity on manual mode. b. The SI request from depot should be ringing and answer by depot console to avoid interference and affect the answer of main line incoming call. c. The call should be a full duplex call.	已確通訊控制盤(服務對講機)不限定於手動架式模式才能啓動，修改本文 2.2.5.3 節描述，節錄如下： "當駕駛員於車上啓動通訊控制盤時，駕駛員可以使用使用服務對講機，要求與行控中心通訊…"。 a. 駕駛員可以在非手動駕駛模式時，開啓列車通訊控制盤，使用服務對講機。 b. CMFT 可以依列車位置設定接聽的責任席位，如機廠區僅限機廠席爲響鈴及接聽。 c. 服務對講機設備與 CMFT 通訊爲半雙工通訊；詳細請參閱 TC1-6A201 列車通訊系統 – 細部設計 3.4 服務對講機. Confirm that TRCP(SI) is not limited to activate on manual driving mode, modify the session 2.2.5.3 description and excerpts below:

項次 No	圖說/章節/項次 Drawing/ Chapter/ Item	審查意見 Review Comments	答覆 Reply Answer
			"When the driver is activated the TRCP in the train, the driver may request intercom with OCC…" a. Driver can activate the TRCP to use SI while train is not in the manual mode. b. CMFT console can pre-set the responsibility area of incoming call from train. E.g. calls from trains in depot will be ringing on depot console c. The communication between CMFT and SI is half-duplex call. Please refer to TC1-6A201 OTC - DETAILED DESIGN 3.4 Service Intercom.
E9	PAGE 71~74	2.2.5.4 旅客緊急通訊(PI) a. 機廠區列車 PI 僅限機廠區席位響鈴及接聽。 b. 通話過程應以全雙工進行。 2.2.5.4 Passenger Emergency Intercom Intercom(PI) a. The PI request from depot should be ringing and answer by depot console to avoid interference and affect the answer of main line incoming call. b. The call should be a full duplex call.	a. CMFT 可以依列車位置設定接聽的責任席位，如機廠區列車僅限機廠席爲響鈴及接聽。 b. 旅客緊急通訊(PI)設備與 CMFT 通訊爲全雙工通訊；請參閱 TC1-6A201 列車通訊系統 – 細部設計 3.3 旅客緊急對講機. a. CMFT console can pre-set the responsibility area of incoming call from train. E.g. calls from trains in depot will be ringing on depot console b. The communication between CMFT and PI is full-duplex call. Please refer to TC1-6A201 OTC - DETAILED DESIGN 3.3 Pssenger (Emergency) Intercom.
E10	PAGE 151	表 2-10：CMFT 主控台與主要通訊功能限制表中，*2：可同時對不同車站廣播。 請說明是否可以同時對不同列車進行廣播，若不行，應增加該功能。 In Table 2-10 CMFT Console communication function limitations, *2: A station accepts one communication from CMFT console. Please clarify is it allow to execute broadcasting to different trains at the same time? If not, please add this function.	已增加說明。 不同主控台可以同時對不同的列車進行廣播。 節錄如下： "*2: 不同主控台在執行列車廣播時無法同時對同一列車廣播, 但可以同時對不同列車廣播." Description has been added. Different consoles can be broadcast to different trains at the same time. Excerpts as below. "Different consoles can be broadcast to different trains, but cannot broadcast to the same train at the same time."
E11	PAGE 154	表 2-11：角色與權限對照表中，監聽旅客動態與報表列印 2 項，權限開放範圍應至所有控制員。 In table 2-11 Roles and Permissions	已調整角色與權限對照表，詳見表 2-11: 角色與權限對照表。 The roles and permissions mapping table has be adjusted. Please refer to

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		Mapping Table, about the authority of Monitor Passenger Movement and Report Printing should be open to all grades.	Table 2-11: Roles and Permissions Mapping Table.
E12	一般 General	1 至 11 項意見，請納入 CMFT 討論會中討論，並依結論辦理修訂。 About item 1 to 11, please add these agenda in CMFT demonstration and update according to the conclusion of the meeting.	知悉。 Noted.
E13	SECT 2.10	章節內容請一下提供： a. 第 2、3 期擴充說明 (1) 硬體擴充：系統預留介面、系統擴充介面、系統硬體擴充說明等 (2) 軟體擴充：系統軟體項目、系統軟體說明等 b. 擴充架構相關圖說 c. 其他 Please provide the content of this chapter as below: a. The phase 2 and 3 expansion description (1) Hardware expansion: system reserved interface, system expansion interface, system hardware expansion instructions, etc. (2) Software expansion: system software item, system software instructions, etc. b. Expandable architecture and related drawings. c. Others.	本章節已依要求修改；請參閱 2.10 相關說明。 The chapter has been modified according to the requirements. Please refer to 2.10 for detailed information.

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D	**SEMPO**	**YM-102T-05078-00**	**JUL 03, 2012**	**Notation 2**
C	**SEMPO**	**YM-102T-01009-00**	**FEB 25, 2013**	**Notation 2**
B	**SEMPO**	**YM-101T-04051-00**	**MAY 31, 2012**	**Notation 2**
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D1	審查意見回覆 8 Comment reply 8	仍請提升爲 Intel Core i7 3.4GHz 或同等級 Quad-Core(含)以上處理器。 Still, please consider to upgrade the CPU to Intel Core i7 3.4GHz or same level of Quad-Core process.	知悉。 CMFT 主控台的處理器已提升爲 Intel Core i7-2600(3.4GHz)。 請參閱 3.3 通訊多功能操作主控台 CMFT Console。 Noted. The CPU of CMFT Console has upgrade to Intel Core i7-2600(3.4GHz). please refer to 3.3 通訊多功能操作主控台 CMFT Console for detail information.
D2	SECT 2.2.5.4，P76~77	圖 2-19 中文爲駕駛員按 PI，英文爲 Passenger 壓 PI，請確認 In Figure 2-19, in Chinese says Driver press PI, but in English translated as Passenger press PI, please confirm.	已修正。 正確爲「旅客按 PI」。 Revised. 「Passenger press PI」 is correct.
D3	SECT 2.7.1.1/165 頁 SECT 2.7.1.1/Page 165	請補充說明 Share storage 是否有備援機制/單點故障疑慮。 Please provide additional information if Shared storage has redundancy mechanisms / single point of failure concerns.	已補充。 Share storage 亦是備援設計，沒有單點故障疑慮。已補充說明於 2.7.1.1 備援設計的硬體規劃 Hardware planning for Redundancy Design。 「儲存裝置配合 CMFT 伺服器備援規劃，亦爲備援設計；其內含雙主動、熱抽換式 RAID 控制器、雙電源及 RAID5 磁碟保護機制」。 Supplemented. The Share storage also adopts redundancy design; there is no single point failure concern. Please refer to 2.7.1.1 備援設計的硬體規劃 Hardware planning for Redundancy Design. 「The Share storage also adopted rudundency design to coordinate with CMFT Server redundancy planning. It contains dual active, hot-swappalbe RAID controllers and power supplisers,

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			and RAID 5 disk protection mechanism」.

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C	■SEMPO	YM-101T-09023-00	OCT 24, 2012	Notation 2
B	■SEMPO	YM-101T-02013-00	MAR 23, 2012	Notation 2
A	■SEMPO	YM-100T-06151-00	NOV 29, 2011	Notation 3
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C1	P67 OF 98	請說明安裝於車站房間之音量衰減器，是否爲三線式器設計，並請繪製結線圖於安裝設計圖說文件中。 Please descript volume attenuator installation in station room, whether it is three wires type design. Please draw wiring diagram in installation design document.	音量衰減器是使用三線式的配置設計。已於 4.13 章節增加說明，請參閱 4.13 及 6.4 章節。 音量衰減器的接線圖將於廣播系統安裝設計文件中繪製。 The volume attenuator is use three wire type. It added in section 4.13, please refer to section 4.13 and 6.4. The wiring of volume attenuator will draw in the installation design document.
C2		請說明控制中心對列車廣播必須具備預錄及口語廣播功能設計。 Please descript control center broadcast to the train will have pre-recorded broadcast and spoken broadcast function design.	行控中心 CMFT 將提供對列車廣播功能，並具備預錄及口語廣播功能。 The CMFT of OCC will provide train broadcast function with the per-recorded and spoken.
C3		請說明車站(各樓層)啓動火警廣播之設計說明。 Please describe how is starting fire broadcasting design in the station (on each floor).	車站(各樓層)啓動火警廣播之設計說明如下： 消防廣播主機係依照水電標提供的分層火警信號來啓動火警廣播。並依據消防法規第 135 條內容所提之第 113 條鳴動方式發佈各樓層的火警訊息，以及依據消防法規第 137 條與 PTS2.4.1 之(2)項規定，提供抑制接點用以抑制火警受信總機之警鈴聲響。請參閱 3.2 章節之(d)項說明。 依據 PTS2.4.1 (11)之 C 項，消防廣播主機提供可與緊急電話連線，強制切入或啓動，做緊急優先廣播之功能。並符合消防法規第 136 條之 3，地上 11 樓以上及地下 3 樓以下，應使用緊急電話方式啓動之規定。請參閱 4.10 章節之(C)項說

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			明。 The description of start fire broadcast for each floor in Station as below. The fire alarm unit is to receive fire signal of each floor from water/electricity utility system to start fire alarm broadcast. According to the fire regulation 135, it describes that use alert sound to announce the fire message to each floor. According to the fire regulation 137 and PTS2.4.1(2), please provide contact point to restrain fire alarm sound until. Please refer to section 3.2 (d). According to the PTS2.4.1 (11) C, the fire alarm unit provide connection for emergency telephone, enforce take control or start for emergency broadcast. And compliance with fire regulation 3 of 136, above 11 floor and below 3 floor should use emergency telephone to start. Please refer to section 4.10 (C).
C4	P49	列車離站警音產生器之警音，每次接收號誌列車離站訊號產生警音時，須能固定警音聲響次數及每次警音產生皆能從第一段開始播放。 When train departure tone generator of alarm sound, and every time receiving signalling system of train departure signals to generate alarm sounds. This sound shall be fixed number of times and every time generates alarm sounds all is start playing from the first.	遵照辦理。請參閱 4.6 章節。 Noted. Please refer to section 4.6.
5	一般 General	請說明廣播語音預錄部分，一段預錄音播放時間最長可播多長，(建議至少能提供播放至 1 分鐘以上)。訊息 Please descript pre-recorded broadcast. How long that a section pre-recorded message of the play time broadcast can reach (suggestion provide at least more than one minute of playing time).	廣播系統提供每一段預錄廣播的播放時間最長可達 3 分鐘。 The PA system provide The maximum time of a section pre-recorded of play time is 3 minutes.
C6	P64	吸頂式喇叭外觀材質爲鐵質雙層烤漆，惟於附件一第 14 頁，項次 25 文件答覆爲鍍鋅鋼板，請釐清材質到底爲	附件一第 14 頁，項次 25 的”概念設計文件答覆”之吸頂式喇叭外觀材質實屬筆誤，外觀材質應爲鐵質雙層

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		何。 The In-ceiling speaker appearance material is iron with double paint, only in Annex I of page 14, item 25 reply galvanized steel. Please clarify what kind of material?	烤漆，已於"在細部設計文件中之答覆"欄位中增加說明。 Annex I of page 14, item 25, "The In-ceiling speaker appearance material is iron with double paint" is slip of a pen. Has added description in detail design document.
C7	P33	圖 5 之火警警音圖形顏色過淡。 The color of fire alarm broadcast graphics is too pale (Figure 5).	已修改，請參閱圖 5。 Revised, please refer figure 5.
C8	P33	圖 5 之緊急廣播作動時，等級次高之火警警音爲 0db，但等級更低的離站音及一般廣播反而有聲音，請說明。 When activate emergency broadcasting. The 0db is the second high of fire alarm sounds, but train departure tone and general broadcast of lower level on the contrary is have voice please describe (Figure 5).	圖 5 上的 0 不是代表 0dB，只是聲音的起始點，代表一般廣播、離站音、火警廣播、緊急廣播還沒發生前的狀態。已於圖說中增加說明，請參閱圖 5。 火警廣播與緊急廣播都是由消防廣播主機的單一輸出埠將聲音傳送至自動增益功率放大器，所以當緊急廣播啓動時，火警廣播一定是完全靜音。 當火警廣播或緊急廣播啓動時，聲音會由消防廣播主機輸出至自動增益功率放大器並啓動放大器的 EMG(emergency)，同時將原有的一般廣播或是離站音再降 20dB，此時還是會有一點聲音。 The 0 in figure 5 is not 0dB. It just a voice start point, means situation before general broadcast, train departure tone, fire broadcast and emergency broadcast happened. The fire alarm and emergency broadcast are form a output of fire alarm unit and transfer to AGC Amplifier. So when the emergency broadcast start, fire alarm broadcast mute. When fire alarm and emergency broadcast start, the sound will form fire alarm unit to AGC and start EMG. In the same time, all general broadcast or train departure tone will to drop 20dB.
C9	P27	(h)排程廣播功能 排程廣播功能若因車站已在執行廣播而未執行，應可在車站廣播結束後，自動執行原訂之排程廣播，避免控制員還要重新操作。	當行控中心 CMFT 執行排程廣播-1 時，如果有 2 個車站未完成執行排程廣播，此未完成執行排程廣播的車站將紀錄於 CMFT 的廣播系統歷史紀錄中。

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		(h) Scheduled Broadcast Function If OCC scheduled broadcast function unable implementation because of station broadcast is already preceding broadcast. The OCC scheduled broadcast should be come after station broadcast end and then automatically to perform. This function is to avoid control staffs need to re-operate.	排程廣播功能不會自動重複執行排程廣播-1，以避免因自動重複執行之功能，而造成排程廣播-2 無法依照排程執行。 When CMFT of OCC start Scheduled Broadcast -1 in two stations not finish scheduled broadcast, the unfinished station will record in the PA history of CMFT. The schedule broadcast can't re-operate schedule -1 automatically. It is to avoid auto re-operate case the schedule broadcast -2 can't start.
C10	4.1 節/P.37 Section 4.1/P.37	請說明「廣播系統歷史紀錄」是否均可記錄每一次的廣播時間、地點及其內容(包括口播及錄播)。 Please descript "broadcasting system history" whether can record every broadcast of time, place, and its contents (including the spoken broadcast and pre-recorded broadcast).	行控中心 CMFT 將提供廣播系統歷史紀錄，並記錄每一次的廣播時間、地點及其內容(包括口播及錄播)。 The CMFT will provide PA history and record each broadcast time, location and contents including the spoken broadcast and pre-recorded broadcast.
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B1	SECT 3.7	依契約 PTS2.4.7(3)「CMFT 人機界面應以動態圖形顯示操作元件及設備狀態，並提供觸控式螢幕控制（本觸控螢幕應能耐拍撞，且爲防括強化玻璃），且具中文操作環境及可顯示中文的終端機設備，使行控中心控制員得以進行相關操作。」，請廠商提供本 LCD 螢幕之「觸控式」方式、「能耐拍撞，且爲防括強化玻璃」之玻璃等級提出詳細設計說明。 According to contract PTS2.4.7 (3) "The CMFT human-machine interface shall prompt interactive graphic display of the operating components and equipment status, come with touch-dial screen control(the touch-dial screen should be able to withstand impact, and with scratch –proof tempered glass), with Mandarin operating environment and can prompt terminal equipment in Mandarin, allowing train control centre personnel to conduct relevant operations". Please ask contractor to provide the way LCD Screen Touch Panel work. "withstand impact, and with scratch –proof tempered glass " Please propose a detail description of glass level.	1. 觸控系統壽命單點敲擊可達 3500 萬次以上，相關面板規格、觸控系統規格已補充於 TC1-67205 2.2.5 通訊多功能操作主控台顯示器。 2. 玻璃落球測試報告已補充，請參閱 TC1-67205 附件五-通訊多功能主控台顯示器。 1. Touch screen system can bear single-point percussion more than 35 million times, related panel specification, touch screen specification please refer to TC1-67205 2.2.5 CMFT CONSOLE MONITOR. 2. Steel ball drop test report of touch screen has replenished, please refer to TC1-67205 APPENDIX 5 CMFT CONSOLE MONITOR.
B2	一般	請繪 CMFT 操作臺上各項設備功能操作使用擺設平面及立面圖。 並請納入於月技術會議時提供之 CMFT「語音介面功能規劃使用說明」。 Please provide the plan and elevation diagram of equipment arrangement at the operations desk. Please include in CMFT "functional Voice UI planning usage illustration" at Monthly Technology Meeting	CMFT 擺設請參考 TC1-67203 通訊多功能操作台 –安裝設計 2.1 通訊多功能操作台設備位置圖清單。 CMFT equipment arrangement at the operators desk please refer to TC1-67203 CMFT – Installation Design 2.1 EQUIPMENT LOCATION DIAGRAM LIST FOR CMFT

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B3	P26	2.0 第二行「時間系統」請更爲「時鐘系統」。 2.0, second line: Replace "time system" with "clock system".	已修正。請參考 2 系統概述。 Revised, please refer to 2 System Description.
B4	P36/37	表 2-3 及表 2-4 操作程序是否正確請重新檢討。 Please review operation procedures in table 2-3 and 2-4, and check their correctness.	表 2-3，表 2-4 已修正。 Table 2-3 and 2-4 has revised.
B5	一般	DLT 在 CMFT 操作上應具備 3 方交談功能。 Direct Line Telephone on CMFT should include three-way conference call.	CMFT 席位的數位電子話機具有多方電話會談功能(3 到 6 方)，詳細請參考 TC1-62201-直線電話系統-細部設計:2.直線電話系統說明。 CMFT 只顯示 DLT 的通話狀態，無法對 DLT 進行操作。 Digital telephone set on CMFT console support conference call (3 to 6 ways), please refer to TC1-62201-DIRECT LINE TELEPHONE SYSTEM-Detail Design: 2.DIRECT LINE TELEPHONE SYSTEM DESCRIPTION. CMFT only display calls status of DLT, cannot operate DLT functions.
B6	SECT 3.1	請廠商提出分析及詳細說明，以確認 CMFT 伺服器（IMB x3650M3）、儲存系統（IBM DS3512）及交換器（ALU OmniSwitch 6400-24）的設備規格，可以符合現階段行控中心及備援行控中心操作，以及未來擴充至 46 個車站規模之需求。廠商應針對 CMFT 伺服器之設備等級 x3650M3、x3650M4 及 x3750M4（包括 CPU 能力、CPU 數量、快取記憶體、記憶體、內部儲存容量、電源供應器、RAID 支援等級、網路介面數等）提出評估及分析資料。另外，於機架上，是否提供螢幕以供本伺服器使用？ Please ask contractor to propose an analysis and detail description to confirm system equipment specification of CMFT Server, Storage System and Switch can meet the current phase OCC and BOCC operation and future expansion up to 46 stations requirements. Please ask contractor to propose a assessment and analysis information according to level of CMFT Server x3650M3,x3650M4 and x3750M4.(include CPU processing	已補充分析資料： 1. IBMx3650M3、IBM DS3512 TPC 需求分析，請參閱 3 系統設備規格:基準與評估。 2. ALU OmniSwitch6400-24 符合 VAN、STP/RSTP 及 LACP 等國際規範。 3. 擴充：在 3 系統設備規格:基準與評估的基礎上，在未來擴增爲 46 車站時，與各系統交易量擴增爲 46/14 倍計算，則每小時平均需求爲 3351.4 QphH，系統最大負載爲 10054.3 QphH，此數據仍在 x3650 運算能力範爲內。且 CMFT 伺服器預留擴充槽，供未來路網延伸時，可以提供更多的處理效能。 4. CMFT 機櫃中已設置鍵盤滑鼠螢幕整合控制器(KVM)。 Analysis data has been added: 1. The TPC requirement analysis of IBM x3650M3 and IBM DS3512 please refer to 3 SYSTEM EQUIPMENT SPECIFICATION. 2. ALU OmniSwitch6400-24 In accordance with the VAN, STP /

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		power, CPU quantity, cached memory, memory, internal storage capacity ,power supplier, RAID level ,number of network interfaces). On the rank are there any monitors provided for CMFT Server?	RSTP and LACP international norms. 3. Expandability: Based on 3 SYSTEM EQUIPMENT SPECIFICATION. If TCL expand to 46 stations in the future, the transaction with each system grows to 46/14 times, than the hourly average requirement will be 3351.4QphH, and maximum loading will be 10054.3 QphH, IBMx3650M3 has capability to cover the maximum loading in the future. CMFT will reserve expansion slots for future extension to enable higher processing performance. 4. CMFT rack contain keyboard mouse and screen integraged controller (KVM).
B7	SECT 3.2	內建磁碟機之容量、型式及數量爲何？ 本案所建議之 RAID 等級爲何？爲何採用本等級 RAID？ 本儲存系統是否須與 IBM System x3650 M3 一併採用？ 本設備與 DCS3950、DS5000、DCS9900、DCS3700 系列之規格差別爲何？ 爲何 BOCC 不提供本儲存設備？ BOCC 的 CMFT 伺服器之內建儲存設備等級爲何？ 請詳列本設備各模組，並說明各模組之功能及其故障所產生之影響，並說明是否會產生單點故障，而造成設備失能之情況。 What are the capacity, model and quantity of interior hard disk? What is the suggested RAID level? Why the RAID level is used in here Does the storage system work with IBM System x3650 M3? What is difference between this specification and DCS3950, DS500, DCS9900, DCS9700 specification? Why the storage device is not provided in BOCC? What is the level of CMFT Server internal storage device?	1. 行控中心儲存系統爲容錯移轉叢集的磁碟叢集設備，採用介面爲 6Gbps 的 SAS 界面與 CMFT Server 連接；本儲存系統使用 RAID 5，可用儲存空間爲 4TB。 2. 備援行控中心不採用備援設計，資料儲存於 CMFT 伺服器內建儲存系統，採用爲 RAID 5 配置，可用儲存空間爲 4TB；容量與行控中心相同。 1. Storage system in OCC is the disk equipment for failover cluster. It connects to CMFT server with SAS interface (6Gbps). The storage system adopt Raid 5 configuration and storage space is 4TB. 2. BOCC is not adopting redundant design. Use CMFT build-in storage as storage system. It use Raid 5 configuration and have the same storage space as OCC storage system.

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		Please list all the modules in this device and explain the individual module functionality and the effect of malfunctioned module. Please explain whether a single point of failure can cause the system break down.	
B8	SECT 3.6	本交換器是否採 stack 方式與另一台交換器連接？ 本交換器是否符合 MEF9 及 MEF14 認證？ 爲避免產品過時，請提供本產品問世之相關資料。 廠商應提供相關設計資料，以確認本設備在頻寬需求、故障切換模式、系統特性及未來擴充等符合營運需求。 BOCC 的交換器請提供雙電源模組。 是否符合 RSTP/STP、QSOP 或其他國際規範之通訊協定？ Are the switch and other switch joined by a stack? Is the switch certified by MEF9 and MEF14? In order to prevent the product obsolescence, please provide the related released information. Please ask contractor to provide the related design information so it can be confirmed that the bandwidth, requirements, switch-over mode, system characteristic meets the operation requirements. In BOCC please provide Two Power Modules in Parallel. Is the switch complied with RSTP/STP or other National Standard Communication Protocol?	1. 在行控中心 CMFT 將有一套以兩個交換器堆疊而成的堆疊式交換器組，此交換器組被視爲一套交換器。 2. 符合 MEF9/MEF14 認證。(符合 MEF 9 的 E-Line/E-LAN 服務，及 MEF14 的 Service Level 規格要求。) 3. Alcatel-Lucent OmniSwitch 6400-24 於 2008Q2 上市，並開始銷售/安裝於電信業者內。 4. 設備提供依合約規範。 5. ALU OmniSwitch6400-24 符合 VAN、STP/RSTP 及 LACP 等國際規範。 1. CMFT would have a set of stacked switches formed by two switches stacking together and would be seen as one set or one logical switch in OCC. 2. In accordance with MEF9/MEF14 certification. (In accordance with the the MEF 9 E-Line/E-LAN service, and MEF14 Service Level specifications.) 3. Alcatel-Lucent OmniSwitch 6400-24 listed and begins selling / installing carriers within 2008Q2. 4. Provided equipments according to the contract. 5. ALU OmniSwitch6400-24 In accordance with the VAN, STP / RSTP and LACP international norms.
B9	SECT 2.1.1(3)	一台 CMFT 主控台將安裝於測試軌控制室，請廠商檢討及評估本主控台與 CMFT 伺服器之間的連接界面，屬電氣界面或光纖界面？ One CMFT Console will be installed in Test Track Control Room. Please ask contractor to access the interface	測試軌 CMFT 控制台與 CMFT 伺服器連接介面修改爲光纖介面，光電轉換設備資訊請參閱 3.8 媒體轉換器；相關圖說請參閱 TC1-67202、TC1-67203。 The interface between CMFT console in Test Track Control room and CMFT server has revised as fiber optic

項次 No	圖說/章節/項次 Drawing/ Chapter/ Item	審查意見 Review Comments	答覆 Reply Answer
		between CMFT Console and Server. Is it an electrical interface fiber optic interface?	interface. For detailed he Ethernet/Fiber converter please refers to 3.8 Media Converter. Related diagram please refer to TC1-67202、TC1-67203.
B10	SECT 2.5.3, SECT 2.7.1.1，意見回覆項次 7	BOCC 無線電設備名稱及數量應依數位無線電系統概念設計 E 版修訂。 The name and quantity of BOCC Tetra should amend according to?.	依 TC1-6B001 數位無線電系統概念設計修訂。 Revised according to TC1-6B001 Digital Radio System Conceptual Design.
B11	SECT 2.6.3、表 2-10 及意見回覆項次 17	文內 CMFT 伺服器可以容納最高 10 台 CMFT 主控台，本資訊與 SECT 2.10 之 20 台數量不一致，請澄清。 捷運公司未來營運時，是否可經由「管理員」修改表（2-10）內之 7 位角色的權限？ 若現階段 CMFT 伺服器（硬體及軟體容量）最高僅能提供 10 台之主控台，亦無法滿足營運需求，請提高可連接之主控台數量。 In the text CMFT Server can allocated maximum 10 CMFT Consoles. The number of allocatable device is not the same in section 2.1 . Please clarify it. Can “Administrator” update the privileges for every role in table 2-10 when MRT operates in the future? If CMFT Server can only support maximum10 consoles and still can not meet the operation requirement. Please raise up the number of consoles it can connect.	1. 權限:系統管理員可以修改所有角色的權限，請參考 2.6.1 使用者管理:角色"CMFT 將預先定義下列角色，管理員可依需求做新增、刪除或修改角色權限..."；與系統管理員"系統管理員角色的權限無法修改，此角色對所有功能皆擁有最高權限。" 2. 擴充性:已修正行控中心與備援行控中心擴充性的描述，請參閱 2.6.3 主控台管理與 2.10 未來擴充性:中行控中心與備援行控中心 (2) CMFT Console 擴充。 1. Authority: Administrator can change every account's permissions please refer to 2.6.1USER MANAGEMENT:Role"CMFT will pre-define the following roles, and the administrator can add, delete or modify the role permissions based on requirements...".and 2.6.1 USER MANAGEMENT: System Administration"The role permissions of System Administration cannot be modified, this role has the highest authority for all functions." 2. Expandability: The description of future expandability of OCC and BOCC has modified. Please refer to 2.6.3 CMFT CONSOLE MANAGEMENT and 2.10 FUTURE EXPANDABILITY :(2) CMFT Console Expandability.
B12	SECT 2.6.1	捷運公司未來營運時，是否可經由「管理員」修改表（2-10）內之 7 位角色的權限？ Can “Administrator” update the privileges for every role in table 2-10 when MRT operates in the future?	系統管理員可以修改所有角色的權限，請參考 2.6.1 使用者管理:角色"CMFT 將預先定義下列角色，管理員可依需求做新增、刪除或修改角色權限..."；與系統管理員"系統管理員角色的權限無法修

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			改，此角色對所有功能皆擁有最高權限。" Administrator can change every account's permissions please refer to 2.6.1USER MANAGEMENT:Role"CMFT will pre-define the following roles, and the administrator can add, delete or modify the role permissions based on requirements...".and 2.6.1 USER MANAGEMENT: System Administration"The role permissions of System Administration cannot be modified, this role has the highest authority for all functions."
B13	SECT 2.7.2.2	OCC 與 BOCC 間之系統切換時間超過 98 分鐘，請廠商針對主要設備之切換方式及程序再行研析，以縮短切換程序。 The communication switch-over process requires 98 minutes to complete. Please ask contractor to analyze the switch-over method and process to reduce completion time.	已修正，依據 TC1-68201 通訊光纖傳輸系統– 細部設計修正，切換時間修正爲 68 分鐘，請參閱 2.7.2.2 切換說明。 Revised, correction based on TC1-68201-Communication FOT System-Detail Design. The communication switch-over process requires 68 minutes. Please refer to 2.7.2.2 SWITCH-OVER DESCRIPTION.
B14	SECT 2.8，表 2-14（數位無線電派遣台軟體）	在 CMFT 主控台故障，系統進入降級模式時，爲何主控台可以進行無線電個呼及發送短訊？請釐清派遣台及主控台之功能。 When CMFT Console is malfunctioned, and the system is running in fall-back mode. Why the console can conduct an Individual Call and send SMS? Please clarify the difference between Active Server and Dispatcher Server?	降級模式: 系指 CMFT 伺服器故障, 且備援主機也無法正常使用時, 此時將啓用降級模式, 而 CMFT 主控台仍有部分功能可以保持運作；降及營運時 CMFT Console 可操作功能，詳細請參考表 2-14。 Fall-back Mode: it means both CMFT server and redundant CMFT server down; CMFT will go into the fall-back mode. In this mode, CMFT console can only provide with partially operated communication functions of the subsystem. Please refer to table 2-14.
B15	SECT 2.10 及意見回覆項次 17、19	內文「CMFT Server 將預留 CPUx1、記憶體、及磁碟擴充槽，供未來第二、三階段路網延伸時，可以提供更多的處理效能。」，因此請廠商列表提供 CMFT 伺服器在現階段及未來第二、三階段所使用 CPU、記憶體、及磁碟擴充槽數量，並提供研析資料，以說明上述 CMFT 伺服器在所連接的 CMFT 主控台數量及車站數量下，CPU 及記憶體等並無過載的疑慮。 請廠商針對內文「CMFT 系統與設備告警將記錄在資料庫中，未來可以有限度開放 CMFT 資料庫，供未來系統存取。」提出圖說資料及如何有限度開放	已補充分析資料： 1. IBMx3650M3 、IBM DS3512 TPC 需求分析，請參閱 3 系統設備規格:基準與評估。 2. 擴充：在 3 系統設備規格:基準與評估的基礎上，在未來擴增爲 46 車站時，與各系統交易量擴增爲 46/14 倍計算，則每小時平均需求爲 3351.4 QphH，系統最大負載爲 10054.3 QphH，此數據仍在 x3650 運算能力範爲內。且 CMFT 伺服器預留擴充槽，供未來路網延伸時，可以提供更多的處理效能。

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		CMFT 資料庫，以確認可供未來系統存取。 In the text"CMFT Server will reserve CPUx1, memory and hard disk expansion slots for future network extension to enable higher processing performance". Please ask contractor to list CPU, memory and hard disk expansion slots quantity in the table. And provide more information on the number of connected CMFT Console and station of CMFT Server has no overloaded CPU and memory. Refer to "CMFT system and equipment alarms will be recorded in the database, in the future, CMFT database can be limited access for future systems". Please provide an illustration diagram and how CMFT database can have limited access for future systems.	3. CMFT 將提供未來系統讀取權限，讀取 CMFT 告警資料表，供未來線系統整合。請參考 2.10 未來擴充性 (4) CMFT 系統告警輸出。 Analysis data has been added: 1. The TPC requirement analysis of IBM x3650M3 and IBM DS3512 please refer to 3 SYSTEM EQUIPMENT SPECIFICATION. 2. Expandability: Based on 3 SYSTEM EQUIPMENT SPECIFICATION. If TCL expand to 46 stations in the future, the transaction with each system grows to 46/14 times, than the hourly average requirement will be 3351.4QphH, and maximum loading will be 10054.3 QphH, IBMx3650M3 has capability to cover the maximum loading in the future. CMFT will reserve expansion slots for future extension to enable higher processing performance. 3. CMFT database can provide read authority of alarm tables for future systems. Please refer to 2.10 FUTURE EXPANDABILITY (4) CMFT System Alarms Export.
B16	意見回覆項次 12	各級網路系統及相關設備是否有支援「multicast」的功能？ Does network system and devices at all level support "Multicast" functionality?	本交換機 Alcatel-Lucent OmniSwitch6400-24 支援 Multicast 功能。請參考 TC1-67205-附件四-網路交換器。 Alcatel-Lucent OmniSwitch6400-24 spuport "Mulitcast" functionality. Please refer to TC1-67205 Appendix 4: Product specification: Features: Multicast.
B17	意見回覆項次 17、41 及 SECT 2.9	請針對「CMFT 圖形介面修改、CMFT 系統參數修改、OTC 設備參數增修 DMD 設備配置與參數增修、場站平面圖修定」提出細部設計資料。 Please refer to "CMFT User Interface Modification 、 CMFT System Parameter Modification 、 OTC Equipment Parameter Modification…" and give detail design information.	在通訊設備房中的一台 CMFT Console 將提供開發軟體，供維護人員修改、編輯 CMFT 之操作環境。請參考 2.9 系統維護。 One of CMFT console in CER can provide with software development tool that maintenance staff use to create or maintain operating environment. Please refer to 2.9 System Maintenance.

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B18	意見回覆項次 14	仍請廠商針對行控中心（包括 BOCC）的區域網路設計，提供合宜做法（例如檢討 NTP 之區網連接等等）及設計說明（例如 LAN 的架構），本區域網路應考量降低網路故障（某一節點或路徑，或網路迴圈產生）時所可能影響之範圍，以避免整體網路同時中斷，例如研析降低 NTP 之區網連接範圍等。 仍請廠商針對營運人員面對設備可能中毒的疑慮下，檢討設置防毒軟體，以減少影響營運的因素，提升系統可靠度。 In the design of LAN architecture please ask contractor to provide the right approach (eg. Review NTP LAN connection etc) and design description (eg LAN architecture) .When a device is malfunctioned (eg some node or path or network), this can avoid to bring down the whole network simultaneously by reducing the affecting area. Eg reduce the scope of NTP LAN connection area. Operators may face virus attack on facilities. Please ask contractor to install anti-virus software .It can reduce factors affecting the service operation and improve the reliability of the system.	OCC CMFT LAN 與 GE 連線，均有兩部交換機互爲備援。請參考 2.1.1(6)網路交換器。 CMFT 所處的網路系統爲一封閉網路，妥善管理，嚴守封閉原則，以免不穩定因素加入。請稟持封閉原則使用本系統。爲求系統穩定，不建議安裝其他系統。 At OCC CMFT LAN, there are redundant network switches connecting to GE switches to prevent a single switch failure resulting system does not work."2.1.1(6) Network Switch" for more information. CMFT installed in a closed network. Using good management and keep the system closed for avoiding other unstable causes. Please use the system as a closed system. For the system stability, installing other systesms in to the system is not advisable.
B19	一般	設備規格請依契約第 16602 章 1.5.3「設計溫度」檢討確認。 The system equipment specification should refer to contract, Chapter 16602 Section 15.3 “”, for further confirmation.	CMFT 設備安裝地點屬第 I 級規範(控制室及設備室)或第 II 級規範(分散安裝於機櫃內或托架上之設備)，CMFT 提供的設備符合 16602 章 1.5.3「設計溫度」要求。 CMFT equipment installation site is a Grade I specifications (control room and equipment room) or Grade II specifications (Equipment dispersed installed in rack or bracket). CMFT equipments satisfied the requirements of 16602: 1.5.3 「 temperature requirements」.
B20	一般	請廠商提供一列表，以說明各控制員在使用主要功能時所產生之主控權協調或衝突狀況。 Please ask contractor to provide a table list which describe compromise and conflict situation when the operator takes the initiative of the main functions.	不同通訊系統的通訊功能皆可獨立使用；同時使用通訊功能時的限制表，請參閱 2.6 系統管理描述。 Communication functions between different communication systems can be used independently. Communication functions limit table please refer to 2.6 SYSTEM MANAGEMENT.

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B21	SECT 2.2.5.4, P69	本節係旅客緊急通訊，然流程說明第 1 點卻寫「駕駛員」按 PI（中英文皆是），到圖 2-19 又變回「Passenger」壓 PI，請確認。 流程說明缺少有駕駛員在列車上啓動通訊控制盤的情況。 This section is Passenger Emergency Intercom. In flow diagram step 1: It writes “driver” presses button. (Both Chinese and English). In flow diagram it changes back to “passenger” presses button. Please double check. There is no action taken by driver to activate the communication control panel in Passenger Emergency Intercom operation flow description.	1. 已修正。"1. 旅客按 PI 按鈕要求與行控中心通訊"。 2. 行控中心如何接聽服務對講機，請參考 2.2.5.3 服務對講機通訊。 3. 駛員如何操作列車通訊控制盤如何操作，請參考 TC1-6A201 列車通訊 – 細部設計與 TC1-6A206 列車通訊 – 系統軟體。 1. Revised, "Passenger presses PI button to request communication with OCC". 2. CMFT how to communiciate with service intercom, please refer to 2.2.5.3 Service Intercom. 3. Drivers how to operate TRCP, please refer to TC1-6A201 ON TRAIN COMMUNICATION - DETAILED DESIGN and TC16A206ON TRAIN COMMUNICATION – SYSTEM SOFTWARE
B22	SECT 2.3.2.5, P98~99	請說明若有 2 台或以上的列車觸發「連動監看」事件，畫面如何顯示於行控中心？ Please explain how video signals display on dedicated wall-mounted monitors when system interlocking function is triggered by two or more trains.	已補充："若有第二部或更多列車觸發連動監看，閉路電視系統將輪播這些列車的影像"。請參閱 2.3.2.5 列車連動監看。 Please refer to 2.3.2.5 ON-TRAIN INTERLOCKING MONITOR"If there are two or more train triggered interlocking function. CCTV will be carousel display these images."
B23	一般	各式流程圖皆缺少中文翻譯。 No Chinese translation in different types of flow diagrams.	中文翻譯已補充，請參閱各流程圖。 Chinese translation has been added; please refer to related operation flow diagram.
B24	SECT 2.3.5.4, P122	旅客緊急通訊廣播流程說明缺少有駕駛員在列車上啓動通訊控制盤的情況。 第 13、14 點之 TRIU，請確認是否爲 TROU。 There is no action taken by driver to activate the communication control panel in Passenger Emergency Intercom flow description. In step 13 and 14 please confirm whether TRIU should be replaced with TROU.	駕駛員啓動通訊控制盤時，旅客緊急通訊操作流程請參考 2.2.5.4 旅客緊急通訊； 2.3.5.4 資料流程圖：表示 CMFT 收到旅客緊急廣播時的資料流程。駛員如何操作列車通訊控制盤如何操作，請參考 TC1-6A201 列車通訊 – 細部設計與 TC1-6A206 列車通訊 – 系統軟體。 第 13, 14 點 TRIU 已修正爲 TROU。 When driver to activate the TRCP on train, passenger emergency intercom flow please refer to 2.2.5.4 PASSENGER EMERGENCY INTERCOM. 2.3.5.4 Data flow diagram

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			describes the data flow while CMFT receive passenger emergency intercom data. Drivers how to operate TRCP, please refer to TC1-6A201 ON TRAIN COMMUNICATION - DETAILED DESIGN and TC16A206ON TRAIN COMMUNICATION – SYSTEM SOFTWARE. Step 13 and 14 TRIU has been replaced with TROU.
B25	SECT 2.7.22, P156	圖 2-58 當 OCC 切換時，SDH 切換至 BOCC 爲何需要 90 分鐘？包不包含人員移動時間？若不包含，請想辦法縮短切換時間。 Why SDH requires 90 minutes to switch over to BOCC in Diagram 2-58? Is travel time included? If no included, please try to reduce the switch-over time.	已修正，依據 TC1-68201 通訊光纖傳輸系統– 細部設計，通訊系統的切換時間爲 68 分鐘，請參閱 2.7.2.2 切換說明。此時間不考慮人員移動時間。 Revised, correction based on TC1-68201-Communication FOT System-Detail Design. The communication switch-over process requires 68 minutes. Please refer to 2.7.2.2 SWITCH-OVER DESCRIPTION. This time does not consider the moving time of operators.
B26	SECT 2.10 4), P160	何謂「有限度」開放 CMFT 資料庫供未來系統存取？請明確說明如何存取？存取哪些資訊？ What is “limited access” to CMFT Database for future systems? Please explain precisely how to access it? What data?	CMFT 將提供未來系統讀取權限，讀取 CMFT 告警資料表，供未來線系統整合。請參考 2.10 未來擴充性(4) CMFT 系統告警輸出。 CMFT database can provide read authority of alarm tables for future systems. Please refer to 2.10 FUTURE EXPANDABILITY (4) CMFT System Alarms Export.
B27	SECT 3.3, P164	CMFT Console 硬碟配置爲何？有幾顆？應至少 2 顆，一顆作爲 OS，一顆作爲資料使用。 What is hard disk allocation for CMFT Console? How many? It requires at least two hard disks. One for OS. One for data access.	通訊與記錄資料是儲存於 CMFT 伺服器；CMFT 主控台不儲存通訊與記錄資料，CMFT 主控台主要磁碟空間消耗在作業系統與 CMFT 系統程式，安裝硬碟一顆已足夠。 Communication log and Data are stored in CMFT server, not stored in CMFT console. CMFT console disk space consumption for operating system and CMFT program, one hard disk is enough for CMFT console.
B28	SECT 3.4, P165	CMFT Server 或 Console 於行控中心及備援行控中心應分別配置至少要有 2 台以上 DVD-RW 燒錄器。 The CMFT Server and Console in OCC and BOCC should be allocated a least two DVD-RD burner.	CMFT 主控台已配置 SuperMulti DVD(DVD-RW)燒錄器。 CMFT console has been equipped SuperMulti DVD (DVD-RW).

項次 No	圖說/章節/項次 Drawing/ Chapter/ Item	審查意見 Review Comments	答覆 Reply Answer
B29	SECT 2, P26	請提供 CMFT Server、CMFT Console 等設備資訊安全管控機制。 Please provide information security management mechanism for CMFT Server and Console.	CMFT 伺服器上允許連線的 CMFT 主控台，採白名單模式，請參考 2.6.3 主控台管理。 CMFT 伺服器及 CMFT 主控台在出廠時將關閉所有不必要的連線埠，並更新至當時穩定的系統版本。 CMFT 所處的網路系統爲一封閉網路，妥善管理，嚴守封閉原則，以免不穩定因素加入。請稟持封閉原則使用本系統。 CMFT Server only allows CMFT Console to connect if it listed in white list. Please refer to 2.6.3 CMFT CONSOLE MANAGEMENT. CMFT Server and CMFT Console will disable unnecessary connection port and updated to stable version when shipping. CMFT installed in a closed network. Using good management and keep the system closed for avoiding other unstable causes. Please use the system as a closed system.
B30	SECT 2.5.3, P140	請工程司考量以硬體或軟體整合方式，將 DCS 的網管告警功能納入 CMFT。 Please ask engineering department to consider a method of integrating hardware and software, so DCS alarm controlled function can be included into CMFT.	CMFT 可以整合 DCS NMS 告警資訊供 CMFT 操作員參考，讓 CMFT 畫面可以顯示與查詢 DCS 系統的告警。 CMFT can integrage DCS NMS alarm information for CMFT operator. Operator can search and seen DCS alarms on CMFT console.
B31	SECT 2.8, P157、158、159	有關「當 CMFT 營運主機發生系統操作故障，且備援主機亦無法正常操作使用時，會進入降級營運模式」並依表 2-14 說明中無法進行列車連動監看、車上即時語音廣播、服務對講機通訊、旅客緊急通訊…等項目將影響行車及旅客安全，請重新檢討系統設計架構，以符復續營運安全需求。 Refer to “When active server is malfunctioned and backup server is not function properly, it will go into the following fall-back mode” and items list in table 2-14(No on train interlocking monitor, service intercom, passenger emergency intercom…..). All these items may affect passenger and on train safety .Please reconsider the system architecture to fulfill the safety requirements for future service operation.	已重新規劃；在降級模式下，列車連動監看將可以持續運作；車上即時語音廣播、服務對講機通訊、旅客緊急通訊等 OTC 功能，將由降及設備 TETRA 派遣台繼續維持服務。 Revised. In fall-back mode, train interlocking monitor will be remain operating, and Dispatcher will provide services for on-train broadcasting, service intercom, passenger emergency intercom.

項次 No	圖說/章節/項次 Drawing/ Chapter/ Item	審查意見 Review Comments	答覆 Reply Answer
B32	SECT 2.10, P160	有關「CMFT 在第一階段配置了 10 台 CMFT Console，CMFT 系統最終可配置 20 台 CMFT Console 以因應未來二、三階段系統擴充之需求」，對於未來二、三階段及第一階段若有增設需求時，僅餘 10 台可供設置，著實不符設置數量需求，請重新檢討可配置數量。 "In phase one CMFT allocates 10 CMFT Consoles. The maximum number of allocatable devices is 20 and it fulfils the needs for phase 2 and phase 3 system expansion". It only remains 10 devices for future phase 2 and 3 expansion. The number of devices left does not meet the requirement. Please reconsider the quantity of allocable devices.	已修正行控中心與備援行控中心擴充性的描述 ，請參閱 2.10 未來擴充性中行控中心與備援行控中心 (2) CMFT Console 擴充。 The expendability description for OCC and BOCC has revised. Please refer to 2.10 FUTURE EXPANDABILITY(2) CMFT CMFT Console Expandability。
B33	一般	依現階段細部設計所提需求，請於進版時提供相關功能頁面設計，以利後續依相關需求進行審查。 According to current stage detail design requirements, please provide related page design for related functions in later version of document.	CMFT 畫面設計與功能操作，請參考 TC1-67206 系統軟體。 CMFT GUI design and functional operation; please refer to TC1-67206 System Software.
B34	SECT 2.2.5.5, P71	PTS 中並無監聽旅客動態之功能，請廠商說明爲何有此一功能？此一功能係透過列車上收音設備監聽車上旅客動態，請問該收音設備爲 PI 麥克風嗎？該收音裝置能有效收音嗎？ In PTS monitor passenger movement through PI is not part of monitoring function. Please ask contractor why this function is included? Is the monitoring function using PI microphone to monitor passenger movement? Can sound receiving device receive sound clearly?	1. 於 PTS 2.4.10 列車通訊 (1)行控中心可藉由車內喇叭對乘客作列車口語廣播及預錄廣播，並可藉由緊急對講機監聽。 2. 透過 PI 麥克風監聽。 1. In PTS 2.4.10 On-Train Communication (1) The OCC can broadcast pre-recording and vocal information to passengers via on-board speakers and listen via emergency intercom. 2. Using PI micorphone to monitor passenger movement.
B35	一般	本份文件中有甚多軟體說明，操作流程說明、流程圖、資料流程圖等，而在 CDSCS 中另有一份「通訊系統多功能操作台 － 系統軟體」送審文件，請說明該份文件與本份文件間的差別。 This document includes software description, operation flow description, flow diagram and data flow diagram… In CDSCS there is other submitted document"". Please describe the difference between these two documents.	細部設計文件含系統說明、操作流程說明、流程圖、資料流程圖, 屬系統分析文件; 系統軟體文件中將描述系統軟體架構、use case diagram 、 sequence diagram、以及畫面構成說明, 屬系統設計文件。 Detail Design includs System description, operation flow description, operation flow diagram, data flow diagram, it is a system analyze document.

項次 No	圖說/章節/項次 Drawing/ Chapter/ Item	審查意見 Review Comments	答覆 Reply Answer
			System Software describes system architecture, use case diagram, sequence diagram, and constructure of GUI. It is a system design document.
B36	SECT 2.5.1, P135	告警資訊來源：CMFT 告警資訊主要來自三個部分：但文中僅有（I）各通訊子系統的設備告警（2）CMFT 操作告警及系統告警，缺少第三部分。 Source of Alarm Information: CMFT alarm information mainly from three parts: Only two sources of information appears in the text (1) Communication subsystem's equipment alarms (2) CMFT operational alarms and system alarms	已修正第三個來源；請參考 2.5.1 告警資訊來源。 Source of alarm information has revised. Please refer to 2.5.1 SOURCES OF ALARM INFORMATION.
B37	SECT 2.5.2.4, P139	歷史告警查詢：「告警訊息將會儲存於『歷史告警記錄』資料表中，爲避免資料量過大影響系統效能，此資料表將規劃保留最近 14 天的歷史資料。」，一個資料規劃良好的系統，每一筆告警的資料量應該不大，建議是否不要限制 14 天，而應視資料量大小決定保留天數。 Historical alarms query:"Alarm message will be stored in the "Historical Alarm" table, to avoid information overload will affect system performance, the table will be planned to keep the last 14 days of historical data" The quantity of data must not be too large for every record. Data planning sustains a robust system. It is suggested not to set a limit for the number of days to keep data, such as 14 days. The amount of data should be used to determine the number of days to keep historical data.	CMFT 依 CDR 意見爲基礎來設計規劃，CMFT 可以保留最近 14 天告警記錄；並且 CMFT 需要將告警資料將傳送給 SCADA 網路伺服器，CMFT 應無存放長期告警的需要，請參閱 2.5.2 告警處理。 CMFT design based on CDR comments, CMFT can keep last 14 days of historical alarm data. And CMFT have to send alarm to SCADA Web Server. CMFT should be no need to hold alarms for long-term. Please refer to 2.5.2 Alarm Handling.

文件審查意見回覆表
RESPONSE REVIEW TRANSMITTAL

A	SEMPO	YM-100T-06192-00	DEC 20, 2011	Notation 3
版次 Revision	審查單位 Issuer	審查文號 Issuer's SRT Reference	審查日期 Date Issued	審查狀況 Status of Approval

項次 No.	圖說/章節/項次 Drawing/ Chapter/ Item	審查意見 Review Comments	答覆 Reply Answer
A1	SECT 2.2.2	CMFT 控制電視牆及 CMFT 之 CCTV 終端機皆未說明是幾分割 (例如最大及最小分割數)? 請補充說明。 Number of the split screens is not specified in wall-mounted monitors and CMFT CCTV terminal. (such as, maximum and minimum number of split screens). Further explanation needed.	1. 電視牆可以設定顯示爲全畫面或 4 分割，補充說明於 2.2.2 閉路電視。 2. CMFT 之 CCTV 監視器視訊是與牆上 16 部監視器之一的顯示內容相同 (包含 4 分割) 。 1. Full screen or 4-split screen can be displayed .please refer to "2.2.2 Closed Circuit Television" for more information。 2. The display video signal of CMFT CCTV monitor will be same as one of the 16 wall-mounted displays (including 4-splits screen).
A2		選擇車站方式建議操作員直接點選螢幕畫面中車站圖控清單替代下拉式清單。(PA) Operators directly click on the station map list is proposed instead of drop-down list.(PA)	CMFT 設計將考量觸碰螢幕操作的方便性，避免設計不利於觸碰螢幕操作的元件。 Touch screen accessibility should be a design priority. Try to avoid interface components that are not applicable for touch screen operation.
A3		車站消防主機作動時，是否提供即時訊息至行控中心 CMFT 工作站。(PA) When fire host activates ,whether or not the real-time message is passed to OCC CMFT Workstations.(PA)	車站消防主機作動時，將會提供即時訊息至行控中心 CMFT 工作站。。 When fire host is activated, the realtime status message will be sent to OCC CMFT Workstations.
4	P18 2.2.1.2	CMFT 主控臺當雙支電話來電同時響起顯示在 Monitor 時請說明如何選擇操作流程 (AT/DLT)。 Please give further explanation on operation flow when two phone calls ring simultaneously on CMFT console.(AT/DLT)	已補充。CMFT 主控臺當雙支電話 (AT 及 DLT) 同時響起時，CMFT Console 顯示的是 DLT 的通話狀態，AT 來電並不會顯示在螢幕上。請參閱“2.2.1 直線電話” Rectified. When two phones, AT and DLT, ring at the same time, CMFT Console will display information of DLT phone state only. Please refer to “2.2.1 Direct Line Telephone”.

A5	P110/P115 表 2-9	BOCC 應有告警管制 (AT/DLT) 。 BOCC should have alarm control (AT/DLT).	已修正。請參閱 2.5.3 告警管制設備清單。 Rectified. Please refers to 2.5.3 Alarm Controlled Equipment List
A6	P108/圖 2.49	請加繪 GPS 時鐘信號源給與 Master Clock (CLOCK) 。 Please add GPS clock passes the clock signals to Master Clock in the diagram.	已修正。請參閱 2.4.3 時間同步設計架構。 Rectified. Please refer to 2.4.3 Time Synchronization Architecture Design
A7	一般	廠商需了解,行控中心失能時(包括行控中心的光纖傳輸節點故障及全機廠停電等狀況)，在備援行控中心的 CMFT 的所有功能應正常運作(包括無線電系統及列車通訊)。 Contractor needs to know when OCC disabled, which includes OCC fiber optical transmission node malfunction or depot power failure, all the functionality of CMFT need to fully operate in BOCC, which includes TETRA or OTC.	CMFT 將依 PTS 2.4.7 (12) 及 PTS 2.2.6 (11) 規定提供相關設備，請參考 2.7.2 備援行控中心系統設計。 All the relative CMFT devices will be provided according to" PTS 2.4.7 (12)" or "PTS 2.2.6 (11)". Please refer to "2.7.2 System Design in BOCC"
A8	一般	依 GS 第 16602 章電子設備 1.5.1，廠商需提供詳細資料，以證明所提供之設備均符合規定的可靠度、維修度要求。 Refer to GS chapter 16602 electronic devices 1.5.1, Contractor needs to provide detail information to prove all devices are reliable and maintainable.	請參考 TC1-60201-通訊 - 可靠度、可用度、維修度分析 (含故障模式、效應與嚴重性分析)。 Please refer to" TC1-60201 - RAM Analysis (including FMECA) Communication" - Reliability, Usability, Maintainability Analysis (including Failure mode, Effects and Severity Analysis)
A9	一般	請提供重要設備內電源模組配置(是否有複置裝置?)之設置理念及實際做法（包括外部電源之配置）。 Please provide the deployment idea and practical approach for power module in important equipment. (include external power deployment)	CMFT Server 電源規格含複置模組，並支援熱抽換。外部電源之配置請參考"TC1-60217- 通訊系統 - 配電設計"。 Redundant ultra-efficient power supplies. Hot swapping is supported. For detail of external power deployment, please refer "TC1-60217- Communications - Power Distribution Design".
A10	SECT 2.2.2	CCTV 影像如何投影至號誌系統之 MINI BOARD? 請提供操作機制。 How CCTV image project an image on Signal System's MINI BOARD? Please provide the operational mechanism.	1. 此處之 MINI BOARD 應爲號誌系統之大型投影顯示器(LPD)； 2. CCTV 如何提供影像給 LPD，請參考 TC1-69201 -.閉路電視系統 - 細部設計:7 行控中心閉路電視系統 3. LPD 如何操作，請參考"TC128088 - SCADA Projective Mimic Panel Display Description"。

			1. MINI BOARD should be the Signal system's Large Projector Displayer (LPD). 2. CCTV System how to provide video streams to LPD. Please refer to TC1-69201 - CCTV System-Detail Design. 7 OCC CCTV" 3. The LPD how to operate please refer to the document "TC128088 - SCADA Projective Mimic Panel Display Description"
A11	SCET 2.2.2.1	請提供 CCTV 軟體 API 及 SDK 之功能描述。 Please provide the CCTV software API and SDK functional description.	依捷運需求，CCTV 相關 API 與 SDK 元件需客製化，詳細功能將在 TCL-67206-通訊系統多功能操作台-系統軟體文件中詳述。 A customizable CCTV API and SDK should be provided to fulfill MTR requirements. Please refer to TCL-67206-CMFT-System Software documentation for more information.
A12	SCET 2.2.2	請提供影像品質、影像下載速度(包括歷史影像及即時影像)、和影像 DELAY、LAG 之設計說明。 Please provide the design details of image quality, image download speed (include historical image and real-time image), image delay and image lag.	1. 影像品質與速度: 詳細數值請參考 TC1-69201 閉路電視系統-細部設計 10.1 影像串流種類與頻寬對照。 2. Delay 與 Lag: CCTV 系統的影像串流是由 IP 攝影機直接編碼輸出，因此對於影像串流的取用數量將有所限制，以避免 IP 攝影機超載使用而造成即時影像之 Delay、lag 及馬賽克問題。這些因素在設計時即已納入考量加以計算以及加以限制，可滿足在同一時間同時提供影像串流給車站監控工作站及車站 NVR 做爲監看及錄影用，以及提供給行控中心電視牆的即時影像顯示。 1. Image Quality and Download Speed: For detail description, please refer to TC1-69201CCTV System-Detail Design 10.1 Description of video stream types and bandwidth comparison 2. Image Delay and Lag: CCTV system video stream encoded by the IP camera directly, so the access number of the video stream access will be limited to

			avoid real-time video delay, lag, and mosaic that caused by IP camera hardware overloading. Those factors has been calculate and restriction in design already to satisfy to provide the video stream to the station surveillance workstation and station NVR as a monitoring and recording and also provide and showed on OCC TV wall at the same time.
A13	表 2-1	請提供 CMFT 之詳細功能清單(請區分綜合功能表及子系統功能表)，並請以樹狀方式及圖表(螢幕呈現畫面)逐項列表說明，本說明亦必須包括資料流程及操作流程。 Please provide CMFT detailed function list (Please divided into integrated menus and sub menus) which is showed in a tree list and graphical way (graphics on the screen), and described for each item, the description must also include data flow and operation flow.	已補充。 1. 功能清單：請參閱 2.6.1 使用者管理； 2. 操作說明：請參閱 2.2 操作功能； 3. 資料流程說明：請參閱 2.3 資料流說明。 4. 螢幕畫面將在 TCL-67206-通訊系統多功能操作台系統軟體文件中詳述。 Rectified. 1. Please refer to "2.6.1 Roles and Permissions Mapping Table " 2. Please refer to "2.2 Operational Function" for instruction manual description. 3. Please refer to "2.3 Data Flow Description" for data flow description. 4. Screen shots will be included in the TCL-67206- CMFT - system software document.
A14	圖 2-1 及圖 2-55，SECT 2.4.3	a. 表內之 PGIS 與 terminal server 之通訊是否爲單向式?或雙向式? b. 本架構圖請包括其他機電系統，例如 SCADA 及 GPS 等。 c. 由於本架構與行控中心等設備皆有互相連接，因此請提供一整體之網路連接圖說。 d. 廠商在設計本地網路架構時，應考量網路之規模，並採合宜之做法(例如檢討 NTP 之區網連接等等)，以降低網路故障(某一節點或路徑，或網路迴圈產生)時所可能影響之範圍，以避免整體網路同時中斷。因此請廠商說明詳細做法，以避免上述網路風暴發生。 e. 行控中心之網路是否提供專屬之網管系統，若有提供，與其他網管系	a. "CMFT 與旅客導覽資訊系統控制台間之通訊方式爲單向通訊。"，請參閱 2.1.1(4) 終端伺服器。 b. 已修改。請參閱 2.1 系統架構。 c. 已修改。請參閱 2.1 系統架構。 d. OCC CMFT LAN 與 GE 連線，均有兩部交換機互爲備援。請參考 2.1.1(6)網路交換器。 e. OCC LAN 將納入 FOT 網管系統。 環線網路環境爲封閉系統，不提供防火牆 與 防毒軟體。 a. "The communication between CMFT and PGIS is one way communication." Please refer to section 2.1.1(4) Terminal Server。 b. Rectified. Please refer to 2.1

		統如何分工?是否提供防火牆及防毒軟體? a. Is it a one or two way communication between PGIS and terminal server? b. Please include other electro-mechanical systems in the system architecture diagram. E.g. SCADA or GPS. c. Since the equipment in OCC are interconnected. So please provide an overall architecture diagram. d. In the design of LAN architecture, Contractor should consider the network size and by adopting the right approach (e.g. review NTP LAN connection, etc.) .When a device is malfunctioned (e.g. some node or path or network loop) , this can avoid to bring down the whole network simultaneously by reducing the affecting area. Please Contractor explain the detailed practice in order to prevent network storm. e. Does a dedicated network management system be provided for OCC network, if yes, how is the division of work with other network management systems? Does it provide firewall and antivirus software?	System Architecture c. Rectified. Please refer to 2.1 System Architecture d. At OCC CMFT LAN, there are redundant network switches connecting to GE switches to prevent a single switch failure resulting system does not work."2.1.1(6) Network Switch" for more information. e. OCC LAN will be included in FOT Network Management System. TCL network environment is closed network. No Firewall and anti-virus software
A15	SECT 2.1.2	本軟體架構請提供所列各項軟體之版本、使用目的，並請確認是否爲較新之版本。 Please provide software version, purpose of use and latest version validation.	已補充，請參閱 2.1.2 軟體架構。 Rectified. Please refer to "2.1.2 Software Architecture"
A16	SECT 2.7	1. 有關 OCC 切換至 BOCC 之時間估算，須待光纖系統切換架構及機制確認後再行討論。 2. 於內文「...經過數次的重送活躍伺服器皆無回應...」，請說明是經過幾次重送？在何種情況下伺服器無法回應？各子系統之備援機制爲何？伺服器在一般情況下其 CPU(或系統)之處理能力爲何？如何估算？ 1. The estimated OCC system	1. 知悉。 2. 已修正。子系統之備援機制請參閱子系統相關文件，CMFT 的降級營運請參考“2.8 降級營運”。 1. Noted. 2. Rectified. Please refer to subsystem related documentations for Subsystem backup mechanism. Please refer to “2.8 Fall-Back Mode” for CMFT fall-back operation.

		switch-over time should be discussed after the FOT switch-over framework and mechanism are confirmed. 2. In the text '.. if the active server does not respond for a number of times..', please explain how many times of re-send? What is the backup mechanism for various subsystems? What is the performance capacity of the CPU (or system) under normal circumstances? How to measure?	
A17	一般	依 2.4.7(13)「廠商應提供 CMFT 應用程式開發之軟體及硬體設備，以利營運人員修改、編輯 CMFT 之操作環境，例如顯示圖形編輯、場站設備之配置數量及配置位置修改、訊息顯示編輯、警示設定及場站平面圖修定等等。」，請廠商說明如何增設 CMFT 數量，及如何讓營運人員修改、編輯 CMFT 之操作環境?並請提供「場站設備之配置數量及配置位置」之設計說明及圖說。 According to section 2.4.7(13)"The contractor shall supply the CMFT application program's development software and firmware equipment to facilitate the operating personnel's modifying and editing the CMFT operating environment, such as the display graphic editing, modifying the station equipment's layout, quantities and allocation locations, signal display editing, alarm setting and train yard/station layout revision, etc.", please explain how to add the number of CMFT, and how the operator to modify and edit the operating environment of CMFT? And should also provide the design descriptions and diagrams for "station equipment's quantities and allocation locations".	已補充。 1. CMFT 主控台擴增: 請參閱 2.6.3 主控台管理。 2. 操作畫面將在 TCL-67206-通訊系統多功能操作台-系統軟體文件中詳述。 Rectified. 1. How to add the number of CMFT console; please refer to "2.6.3 CMFT Console Management". 2. TCL-67206-CMFT-System Software design document contains a detailed description of User Interfaces.
A18	SECT 2.4	OCC 及 BOCC 之第一階 master clock 是否可互相備援？ Could the stratum one master clock in OCC and BOCC backup each other?	當 OCC 母鐘設備故障時，BOCC 的母鐘可以接替 OCC 母鐘的功能，持續提供 NTP 同步功能。可參考 TC1-66201-時鐘系統 –細部設計 5.3 章節「NTP 的內置備援」及 TC1-66201 圖 18&19。 When the OCC master clock

			equipment failure, BOCC master clock can take over OCC master clock function to provide NTP time synchronization function. Please refer to TC1-66201 Clock System-Detail Design section 5.3: NTP BUILT-IN REDUNDANCY and TC1-66201 figure 18 & 19.
A19	SECT 2.5.3	1. 本表內之 FOT 系統是否爲相對應之網管系統？有包括 DCS 系統？ 2. 是否須將告警訊號傳至 SCADA? 3. CMFT 系統是否有預留將系統狀況(包括設備告警狀況)輸出之功能及相關介面，以供捷運公司未來使用。 1. Is FOT system within this table corresponds to the network management system? Does it include DCS system? 2. Should alarm signal need to pass to SCADA? 3. Does the CMFT system reserve the system state (include facility alarm state) export function and relative interface for TRTC future use?	1. FOT 網管系統不包含 DCS。 2. 已補充。"主要通訊設備的故障訊息，將依“告警方式”參數化的設定內容，傳送給 SCADA 系統。"，請參閱 2.5.2 告警處理。 3. 已補充。請參考 2.10 未來擴充性。 1. DCS is not included in the FOT network management system. 2. Please refer to "2.5.2 ALARM HANDLING": "Whether malfunction error message of main communication equipments delivers to SCADA system is according to alarm mode's parameterized setup" 3. Rectified. Please refer to "2.10 FUTURE EXPANDABILITY"
A20	一般	請說明 CMFT 系統及個子系統之降級運作模式。 Please explain CMFT system and subsystems operations in fall-back mode.	已補充。請參閱 2.8 降級營運。 Rectified. Please refer to "2.8 Fall-back Mode"
A21	表 2-10	請說明表內有關「擁有操作權限」之意義？操作環境是否可依登入身分而有所變化？請廠商依 PTS2.4.7 說明如何處理「CMFT 人機界面應以動態圖形顯示操作元件及設備狀態，並提供觸控式螢幕控制(本觸控螢幕應能耐拍撞，且爲防括強化玻璃)，且具中文操作環境及可顯示中文的終端機設備，使行控中心控制員得以進行相關操作。例如，控制員可經由階層式操作，進入車站設備配置圖，點選攝影機。CMFT 可由鍵盤、滑鼠及螢幕觸控等方式控制。重要之操控動作應有再確認之機制，以避免誤動作發生。」，尤其是觸控功能及誤觸機制。 Please explain about the meaning of “have operational permission”? May operating environment be different by	1. 操作權限之意義：已修正；請參閱“2.6.1 使用者管理:角色”。 2. 登入身分與環境：請參閱“2.6.1 使用者管理:帳號”。 3. 操作方式與確認：請參閱“2.1.1 系統架構說明 (3) 通訊多功能操作主控台” 。詳細操作方式與再確認機制，將在 TCL-67206-通訊系統多功能操作台系統軟體文件詳述。 1. Definition of Operational Permission: please refer to "2.6.1 User Management". 2. Login Identity and Environment: 3. Please refer to "2.6.1 USER MANAGEMENT: Account". 4. Operation mode and Re-confirmation: Refer to "2.1.1

		login ID? According to PTS 2.4.7, please explain how to handle “The CMFT human-machine interface shall prompt interactive graphic display of the operating components and equipment status, and come with a touch-dial screen control (the touch-dial screen shall be able to withstand impact, and with scratch-proof tempered glass), with Mandarin-operating environment and can prompt terminal equipment in Mandarin, allowing train control center personnel to conduct relevant operations. For instance, a control can access a stations equipment layout drawing via a hierarchical operation to click the camera. The CMFT can be controlled via the keyboard, mouse and touch-dial screen. Important operating motions shall come with a reconfirmation mechanism to avoid mishandling.” Especially of touch-dial function and avoid mishandling mechanism.	SYSTEM ARCHITECTURE DESCRIPTION (3) CMFT Console" 。Further details on operational mode and re-confirmation mechanism will be described in TCL-67206-CMFT-System Software documentation.
A22	表 2-1 系統軟體功能	有關表 2-1 項次 4，點矩陣顯示及旅客導覽資訊軟體之軟體功能描述，其中包含開啓/關閉車站顯示器，請澄清該功能，是否可設定爲定時啓閉及人工操作啓閉車站顯示器等 2 種功能。 Regarding table 2-1 item 4 DMD & PGI S/W software description it contains Active/shutdown DMD of stations. Please clarify this function whether automatic (in timely manner) and manually operated Active/shutdown DMD of stations configuration are both supported.	已補充。詳見 2.2.4 點矩陣顯示器。"綠能政策： 操作員可以在 CMFT 主控台改變當日的營運時間(可設定爲：起-迄時間或全日營運)；當到達設定的營運時間，CMFT 主控台將主動要求 DMD 系統開啓或關閉節能，讓 DMD 關閉車站顯示器，以配合綠能政策。該營運時間將顯示在明顯的位置，並讓管理員或主任控制員可以依當日營運需求調整，該設定值將一直持續，直到營運時間再被調整。 另外 CMFT 也提供了非營運時段手動開啓與關閉車站顯示器之整合功能，以保留行控中心的主控權。 爲防止誤操作，在設定的營運時段範圍內，CMFT 與 DMD 將不接受 DMD 關閉顯示器之指令"。 Rectified. Please refer to "2.2.4 DOT MATRIX DISPLAY". "Green Environmental Protection Policy: The operator can change the daily opening hours by setting up the start and end time or a 24 hours service.

			When a predetermined set-up time has been reached, CMFT will automatically send a request to DMD system to turn on or off the Power Save on a DMD. By following the Policy of Green Environmental Protection, it closes the DMD display. The daily opening hours will be displayed in an obvious location, so that the administrator or operator can adjust it to meet daily operation requirements. The original daily opening hours settings is kept until the next daily opening hours adjustment. In addition CMFT also takes the initiative by providing the DMD manual shutdown function in the non-operating hours to meet the energy saving policy. To avoid operational error produced due to faulty operation, CMFT and DMD will not accept any display shutdown instructions within setup opening hours."
A23	SECT 2.2.2.2/P24	有關 CMFT 主控台變更牆上監視器影像操作作業流程，其中僅於流程第 2 點說明「若無法完成操作，畫面上將顯示警示通知操作者」，而未詳加描述，若無法完成操作而畫面顯示警示通知操作者後，操作者該如何處理之程序(是否需 RESET)，請補充。 Regarding to change wall-mounted monitor video image operation flow, it states “if operator cannot complete the operation, the console will prompt alert to operator” in step 2 without further explanation. Please give further explanation on how the operator handles the process (Reset required), if the operation fails and prompts the alert message.	已補充。請參考 2.2.2.2 變更牆上監視器影像。"若無法完成操作，畫面上將顯示警示通知操作者，並導引到障礙排除畫面。" Rectified, Please refer to 2.2.2.2 Change Video Image on Wall-mounted Monitor. “If system cannot complete the operation, the console will prompt alert to operator and redirect to troubleshooting page ”
A24	SECT 2.2.3/P28	有關本文描述，車站廣播有其優先順序，當行控中心的廣播因廣播優先順序而被中斷時，CMFT 人機介面軟體將會警示操作者。另當車站優先廣播撥放完畢後，原行控中心之廣播是否會重播，或跳至下一預錄之廣播。請澄清。 The description in this text states “station broadcast with priority. When	已補充。請參考 2.2.3 廣播(車站) “若是 CMFT 收到廣播中斷訊息，CMFT Console 會在畫面上提示廣播備中斷訊息，透過中斷提示訊息，行控人員可以決定是否重新播放該訊息。” Rectified. “If CMFT receive PA interrupted signal from PA system, CMFT Console will show PA is

		OCC broadcasting was interrupted because of the priority, CMFT HMI software will alert the operator." Additionally when higher priority broadcasting terminates, whether OCC replay the previous broadcasting or jump to next pre-recorded broadcasting. Please clarify it.	interrupted, to re-broadcast this message will be decided by Operator."
A25	SECT 2.2.3.1/P31,33	有關廣播-預錄廣播及即時語音廣播操作流程，其中均僅於流程第 4 點說明「若語音通道連結失敗，警示操作員指定車站廣播操作失效」，而未詳加描述，若語音通道連結失敗，操作者該如何處理之程序（是否須 RESET)，請補充 Regarding to pre-recorded broadcast and live broadcast operation flows, it states" if fails to connect to audio channel of selected station, prompt alert to operator that cannot complete the operation with the selected station." in step 4. Please give further explanation on how the operator handles the process, if the connection fails.	已補充。請參考 2.2.3.1 預錄語音廣播。"若語音通道連結失敗，警示操作員指定車站廣播操作失敗，並導引到障礙排除畫面。" Rectified. Please refer to 2.2.3.1 Pre-recorded Broadcast "If fails to connect to the audio channel of selected station, prompt alert to operator that cannot complete the operation with the selected station and redirect to troubleshooting page."
A26	SCET 2.2.4.1/P36，SECT 2.2.4.2/P37	有關顯示預錄訊息及手動輸入即時訊息操作流程，於流程第 4 點說明「若有錯誤顯示錯誤訊息」。請補充，當出現錯誤時，相關操作人員後續處理程序爲何 Regarding to pre-recorded message display and real- time display operation flows, it states "if operates failed, prompt error message." in step 4. Please give further explanation on how the operator handles the process, if error message occurs.	已補充。請參考 2.2.4.1 預錄訊息顯示。"若無法完成操作，畫面上將顯示警示通知操作者，並導引到障礙排除畫面。" Rectified. Please refer to 2.2.4.1 Pre-recorded message display. "If operates failed, prompt error message and redirect to troubleshooting page."
A27	SCET 2.2.5/P41	有關本節列車通訊設備描述，相關意見說明如下： 1. 當行控中心與車上服務對講機通訊時，該通訊內容是否有監聽設備，及雙向錄音裝置。 2. 當行控中心與旅客緊急通訊時，該通訊內容是否有監聽設備，及雙向錄音裝置。 3. 當手動駕駛控制員與車內旅客通訊時，該通訊內容於 OCC 是否有監聽設備，另車內及 OCC 是否有錄音裝置。 Regarding to OTC description in this	1. 行控中心的 CMFT 語音通信有錄音設備。詳細錄音請參考 TC1-63201-自動電話系統-細部設計 3.4 電話錄音功能。 2. 同上 3. 手動駕駛控制員與車內旅客通訊時，沒有與 OCC 語音通訊，OCC 無法對該通訊錄音。列車內無錄音裝置。 1. OCC CMFT voice communication device provides voice recording. For detail description, please refer to TC1-63201-AT System-Detail

		section, we have following suggestions: 1. When conducting intercom communication between OCC and Service Intercom, whether monitoring device or two-way audio recording device are installed for recording content of the intercom communication. 2. When conducting intercom communication between OCC and passenger emergency intercom, whether monitoring device or two-way audio recording device are installed for recording content of the intercom communication. 3. When conducting intercom communication between driver and passenger emergency intercom, will OCC be recording content of the intercom. Is there any recording device installed in vehicle and OCC?	Design 3.4 Telephone Voice Recording Function 2. Ditto. 3. When driver in communication with passenger emergency intercom, it do not have voice communication with OCC. OCC won't be record this communication.
A28	SECT 2.2.5.4/P48	有關旅客緊急通訊操作流程，未說明當列車手動駕駛操作時，駕駛如何與車內使用旅客緊急通話器（passenger intercom）之旅客通話相關操作方式，及行控中心通訊多功能操作台（CMFT）如何顯示該通話模式（OCC 是否可監聽），請補充。 Regarding to passenger emergency intercom flow it does not mention how the driver use PI to communicate with passengers and how to display this communication mode on the CMFT console (can the voice be monitoring by OCC), when train operates manually. Please provide further explanation.	已補充。請參考 2.2.5.4 旅客緊急通訊。 "當車上旅客要求緊急通訊時，可按下"旅客緊急通訊"按鈕與控制人員通話。旅客緊急通訊將直接送到行控中心，等待操作員接聽；若是車上通訊控制盤被駕駛員啓動，則旅客緊急通訊將等待駕駛員接聽，駕駛員接聽的動作將傳送至行控中心記錄，若 15 秒內駕駛員未接聽，該 PI 將轉發給行控中心，由行控中心接聽。" Rectified. Please refer to "2.2.5,4 Passenger Emergency Intercom"。 "When passengers on train request emergency intercom with operator, they can press the "Passenger Emergency Intercom" button and communication with operator. The emergency call is forward to OCC and waits for the OCC operator to answer .But when communication control panel in train is activated by the driver, emergency call waits for the driver to answer. OCC keep tracks of received phone call by taking a log file. If the driver does not answer the phone within 15 seconds, emergency

			call is forward to OCC."
A29	SECT 2.2.5.5/49	有關本節描述 OCC 操作員可透過 PI(Passenger intercom）監聽車上旅客動態，請說明該監聽設備係安裝於 PI（即 PI 本身即有監聽功能）或另有其他監聽設備。 In this section it describes OCC operator can monitor passenger movement through PI. Please explain this monitoring device is installed in PI (i.e., PI itself with monitoring function.) or have some other device.	已補充。請參閱 2.2.5.5 監聽旅客動態："OCC 操作員可透過 PI 的收音設備來監聽車上旅客的動態"。 Rectified. Please refer to" 2.2.5,4 Passenger Emergency Movement"。 MOVEMENT："OCC operators can monitor passengers' movement through PI audio receiver."
A30	SCET 2.2.5.6/P51, 2.2.5.6.2/P52,	有關車載旅客資訊顯示器（PID）顯示預錄訊息及顯示即時訊息操作流程，未說明若有突發狀況，需臨時停止預錄訊息或即時訊息之顯示，請補充。 Regarding to Pre-recorded or instant message operation flow, it does not mention the needs to suspend the pre-recorded or instant message. Please provide further explanation.	已補充。請參閱 2.2.5.6 車載旅客資訊顯示器訊息顯示。 Rectified. please refer to "2.2.5.6 ONBOARD PID MESSAGE DISPLAY"
A31	SECT 2.2.2/P69-P72	當行控中心控制員（operator）欲監看之影像，未設定顯示於 OCC 監看牆（monitor wall）牆時，請澄清是否可由控制員透過通訊多功能操作台（CMFT）之操作，將畫面調出顯示於 CMFT 主控台上。 When OCC operator wants to monitor the images without configuring on OCC wall-mounted monitors, please clarify whether operator can operate CMFT console to display images or not.	CMFT 的 CCTV 監視器是設計用於同步顯示欲監看的電視牆螢幕的畫面，因此當行控中心控制員欲監看的即時影像未設定顯示於 OCC 電視牆螢幕時，行控中心控制員無法透過通訊多功能操作台（CMFT）之操作，將畫面調出顯示於 CMFT 的 CCTV 監視器上。 CMFT CCTV monitor is designed for synchronous display the selected screen from TV wall monitor which to be monitoring, the OCC operator is not able to operate CMFT to call and display the video on CMFT CCTV monitor when the video is not set and displayed on the OCC TV wall monitor.
A32	SECT 2.3.5.4/P97	有關旅客緊急通訊廣播流程，未說明當列車手動駕駛操作時，手動駕駛員如何利用手動駕駛控制台，進行車內廣播，及行控中心相關控制員是否可監聽手動駕駛員廣播內容，請補充。 Regarding to passenger emergency intercom flow, it does not mention how the driver use manual control console to broadcast in the train, when train operates manually. And whether OCC operator can monitor broadcast content from the driver or	1. 當列車手動駕駛操作時，手動駕駛員如何利用手動駕駛控制台，進行車內廣播，請參閱 TC1-6A201-列車通訊系統-細部設計。 2. OCC CMFT 無法監聽手動駕駛員廣播內容；請參考第 27 項。 1. Please refer to "TC1-6A201 - OTC System- Detailed Design" for ways to broadcast under manual mode. 2. OCC CMFT can't monitor the

		not. Please provide further explanation.	broadcast content of the driver. Please refer to item 27.
A33	SECT 2.3.5.5/P99	有關旅客緊急通訊（監聽模式）廣播流程，該監聽之操作，係透過旅客緊急通話器（passenger intercom）監聽，或利用其他設備，請補充。 Regarding to passenger emergency intercom flow (monitor mode), the operation of the monitoring is through PI or some other device. Please provide further explanation.	PI 監聽模式是透過列車緊急電話 (PI) 來監聽旅客動態。 PI monitor mode, to monitor passenger's movement through PI equipments.
A34	SECT 2.5.2.1/P122	有關告警顏色，相關意見說明如下： 1. 有關 CMFT 告警顏色使用青綠色（CYAN），因與其他操控台 information call 的綠色(GREEN）顏色相近，容易使操作人員不易辨識，請採用其他較容易辨識之顏色。 2. 告警顏色係涉及機電系統人機介面之設計，故請考量整體機電系統（電聯車、行車監控、號誌、月台門、通訊、供電、機廠設備）後，統一其設置原則。 Regarding to alarm color, we have following suggestions: 1. Regarding to using cyan CMFT alarm color it is too close to other console's information call color.(Green) It is easy for Operator not be able to distinguish the colors. 2. Alarm color involves in electro-mechanical system HMI design, so please consider overall electro-mechanical system (Vehicle, ATS, Signal, Platform door, Communications, Power Supply, Depot facilities), unify the principle of setting.	知悉，配合機電系統整體規劃設置。 Noted. Will consider the electro-mechanical system setup plan.
A35	SCET 2.5.2.2/P113	有關告警訊息定義，相關意見說明如下： 依通訊多能操作台系統概念設計(TCI-67001-0）第 3.1.2 節說明，CMFT 會顯示通訊設備狀態，並將行控中心、機廠、車站及相關建築物之主要通訊設備錯誤訊息傳送至 SCADA，但並未說明 CMFT 將顯示 SCADA 之告警訊息。惟表 2-8 說明，CMFT 產生之告警代碼範圍包含 SCADA（代碼 700-799 ），請	已修正。請參閱 2.5.2.2 告警訊息定義。 Rectified. Please refer to "2.5.2.2 ALARM MESSAGE DEFINITION".

		澄清是否誤值。若此處非誤植，請說明當 SCADA 將傳送至 CMFT 告警之設備/系統爲何。 Regarding to alarm message definition, we have following suggestions: According to the description in the section 3.1.2 of CMFT CDR, CMFT will display the status of communication equipment, and the error messages from those main communication system equipment in OCC, depots, stations, and associate buildings will through CMFT transmit to SCADA system. It does not mention about CMFT will display the alarm messages, but in table 2-8 described that the alarm ID generated by CMFT includes SCADA (ID 700-799), please clarify whether it was error or not. If it is correct, please provide further explanation about what is the alarm equipment/system that SCADA sends to CMFT.	
A36	SECT 2.7.1.2(1)/P124	有關 CMFT 備援切換說明，於備援切換前，正常情況下 CMFT_1 爲活躍伺服器（active server)，請將 active server 之中文翻譯修正爲「主動伺服器」。 About description of switch-over, in the section “before switch-over”, “Under normal circumstances, CMFT_1 is as the (active server)…”, please amend the Chinese translation of “active server” to “主動伺服器”.	已修正。本文件關於活躍伺服器 (active server)修改爲「主動伺服器」。 Rectified. Amend the chinses translation of “Active server” to “主動伺服器”.
A37	SECT 6.1.3/P144	有關 CMFT 主控台之設備編號爲 4MWS，非本頁描述之 4CWS，請修正。 The CMFT console equipment number is 4MWS not 4CWS. Please correct.	已修正。請參考 6.1.3 設備流水號。 Rectified. Please refer to "6.1.3 EQUIPMENT SERIAL NUMBER".
A38	SECT 2.3.5.5/P99	當列車亦長停駛或車內旅客有異常情況，行控中心除監聽旅客動態外，請將列車影像監看部分納入連動設計選項，以符合實際營運需求。 When train stops anomalously or passenger encounters abnormal	已補充。列車異常停駛與列車監聽時，加入列車影像連動監看，請參閱“2.3.2.5 列車連動監看”與“2.2.5 列車通訊設備”。 Rectified. The event of train unexpected stop and OCC monitor

		situations, OCC can only support voice monitoring on passenger movement. Please bring image monitoring into design options to fulfill the demand of normal operation.	passenger movement will be added into On-Train interlocking monitor, Please refer to “2.3.2.5 On-Train Interlocking Monitor”.
A39	一般	依 PTS 2.4.7(8)CMFT 操作失效時，應有降級模式操作之設計機制。其降級模式中，行控中心各子系統操作功能與原有功能差異如何？請於本文中詳細說明。 According to PTS2.4.7(8) “When the CMFT operations should fail, there shall be a design mechanism for a reduce mode operation.” , please explain detailed for the differences of operating functions of various subsystems between fall-back mode and normal mode.	已補充。請參閱 2.8 降級營運。 Rectified. Please refer to "2.8 Fall-back operation"
A40	一般	行控中心 CMFT 系統功能將影響營運系統是否正常運作，請提供詳細風險控管及緊急復原計畫。 OCC CMFT system functionality may affect the normal operation system. Please provide detailed explanation of risk management and emergency recovery plan.	CMFT 伺服器於行控中心的設計是採用複製裝置，以及有降級計畫，不會影響系統營運。 風險控管請參考 TC1-60202 通訊 - 子系統危險分析 Communications - SubSystem Hazard Analysis (SSHA)文件說明。 緊急復原計畫將於 TC1-67106 通訊系統多功能操作台 - 維修手冊 Communications Multi Function Terminal - Maintenance Manual 文件說明如何故障排除及修復。 CMFT Server in OCC is redundant design, and CMFT has fall-back plan. CMFT won’t affect the normal operation system. Risk management please refers to TC1-60202-Communication-SubSystem Hazard Analysis (SSHA). Emergency recovery plan will describe in TC1-67106-CMFT-Maintenance Manual.
A41	一般	請提供後續增設 CMFT 主控需求時，可經由簡便操作步驟及設定完成新設主控台，並於文中增列 CMFT 擴充相關說明。 Please provide an option to go through simple operation and configuration steps to setup new consoles, when additional CMFT consoles are needed.	1. CMFT 主控台擴增:請參閱 2.6.4 主控台管理。 2. CMFT 擴增:請參閱 2.10 未來擴充性。 1. CMFT Console Expansion: please refer to "2.6.3 CMFT Console Management" 2. CMFT Expansion: please refer to "2.9 Future Expandability"

		Add related explanation for CMFT extension in the document.	
A42	SECT 2.2.2/P22	請考量現行捷運公司閉路電視操作模式，明訂 CMFT 可操控 SPEED DOME CAMERA 的功能。 Please consider the current operation mode of CCTV, and make sure CMFT can control SPEED DOME CAMERA.	已補充。請參考 2.2.2.4 SPEED DOME CAMERA 操作。 Rectified. Please refer to 2.2.2.4 Speed Dome Camera.
A43	SECT 2.5.1/P110	請以硬體或軟體整合方式，將 DCS 的網管警告功能納入 CMFT。 Please user hardware or software integration method to bring DCS Network Management alert function into CMFT	FOT 網管系統之告警不包含 DCS 設備，CMFT 整合 FOT 系統之告警功能不包含 DCS 設備。 DCS device is not included in FOT network management system, CMFT integrated alarm function of the FOT system does not contain the DCS equipment