JICA No.	Equipment	Equipment Model	Acquisition	Storage	Remark
			Date	Place	
13-3-002206	Single Beam Echo sounding System	PDR-1300	2014/1/20	MPWT/WD	For Shallow Area Survey
13-3-002207	Multi-beam Echo sounding System	SONIC2020	2014/1/20	MPWT/WD	Including Spare parts
13-3-002208	GNSS positioning System	SPS361	2014/1/20	MPWT/WD	Including Spare parts
13-3-002209	Surface SVP Profiler	Micro•X SV	2014/1/20	MPWT/WD	Including Spare parts
13-3-002210	ADCP System	ADP 500khz, SPS351	2014/1/20	MPWT/WD	Including Spare parts
13-3-002211	Motion Sensor	DMS-10	2014/1/20	MPWT/WD	Including Spare parts
13-3-002212	SVP Profiler	Minos•X SV•P	2014/1/20	MPWT/WD	Including Spare parts
13-3-002213	Hydrographic Survey Software	HYPACK MAX and HYSWEEP	2014/1/20	MPWT/WD	
13-3-002214	Hydrographic Survey Software	HYPACK MAX and HYSWEEP	2014/1/20	MPWT/WD	
13-3-002215	Note computer	ThinkPad T430	2014/1/20	MPWT/WD	For Data Acquisition
13-3-002216	Note computer	ThinkPad T430	2014/1/20	MPWT/WD	For Data Acquisition
13-3-002217	Note computer	ThinkPad T430	2014/1/20	MPWT/WD	For Data Acquisition
13-3-002218	Desktop computer	ThinkPad M72E	2014/1/20	MPWT/WD	For Data Acquisition
13-3-002219	Desktop computer	ThinkPad M72E	2014/1/20	MPWT/WD	For Data Processing
13-3-002220	Desktop computer monitor	LENOVO LS2223	2014/1/20	MPWT/WD	For Data Processing
13-3-002221	Desktop computer monitor	LENOVO LS2223	2014/1/20	MPWT/WD	For Data Processing
13-3-002222	Desktop computer monitor	LENOVO LS2223	2014/1/20	MPWT/WD	For Data Processing
13-3-002223	Desktop computer monitor	LENOVO LS2223	2014/1/20	MPWT/WD	For Data Processing
13-3-002224	Survey Navigation monitor	LENOVO LS2223	2014/1/20	MPWT/WD	For Survey Navigation
13-3-002225	Survey Navigation monitor	LENOVO LS2223	2014/1/20	MPWT/WD	For Survey Navigation
13-3-002226	External HDD	HD-PCT1TU3	2014/1/20	MPWT/WD	For Data Backup
13-3-002227	External HDD	HD-PCT1TU3	2014/1/20	MPWT/WD	For Data Backup
13-3-002228	USB-Serial port convertor	Edgeport/8	2014/1/20	MPWT/WD	For Data Converting
13-3-002229	USB-Serial port convertor	Edgeport/8	2014/1/20	MPWT/WD	For Data Converting
13-3-002230	Junction Box	J-BOX-1G(200)	2014/1/20	MPWT/WD	For Data Synchonization
13-3-002231	CAD Software	AUTOCAD MAP 3D 2014	2014/1/20	MPWT/WD	For DTM Editing
13-3-002232	GIS Software	ArcGIS for Desktop Basic	2014/1/20	MPWT/WD	For GIS Editing
13-3-002233	GIS Software	ArcGIS for Desktop Basic	2014/1/20	MPWT/WD	For GIS Editing
13-3-002234	A0 Plotter	DesignJet T920	2014/1/20	MPWT/WD	For Map Plotting
13-3-002237	CAD Software	AUTOCAD MAP 3D 2014	2014/1/20	MPWT/WD	For DTM Editing

## List of Equipment Procured by Study Team

JICA No.	Equipment	Equipment Model	Acquisition Date	Storage Place	Remark
13-3-002235	Tide Gauge	5225WLB-2	2013/9/11	PAS SHV Port	Purchased in Japan For Tide station
13-3-002236	Tide Gauge	RT710-W	2013/8/23	MPWT/WD	Purchased in Japan For Temporay site
13-3-002238	UPS	GXT-2000MTPLUS230	2014/1/23	MPWT/WD	Purchased in Cambodia For Hydrographic survey
13-3-002239	UPS	GXT-2000MTPLUS230	2014/1/23	MPWT/WD	Purchased in Cambodia For Data Processing
14-3-002739	ENC Production Desktop computer	DELL PRECISION T1700	2014/5/16	MPWT/WD	Purchased in Cambodia For ENC Production
14-3-002740	UPS	GXT-2000MTPLUS230	2014/5/16	MPWT/WD	Purchased in Cambodia For Data Processing
14-3-002741	NAS Desktop computer	DELL OPTIPLEX 9020	2015/2/11	MPWT/WD	Purchased in Cambodia For NAS server
14-3-002742	NAS HDD	D-Link ShareCenter	2014/6/9	MPWT/WD	Purchased in Cambodia For Data Backup
15-3-002128	Tide Gauge	RT710-W	2016/2/23	MPWT/WD	Purchased in Japan For Temporay site
15-3-002129	ENC Production Software	SevenCs, FME	2016/2/23	MPWT/WD	Purchased in Japan For ENC Production
15-3-002130	Unmanned Aerial Vehicle	PHANTOM3	2016/3/10	MPWT/WD	Purchased in Japan For Remote Photo Taking





















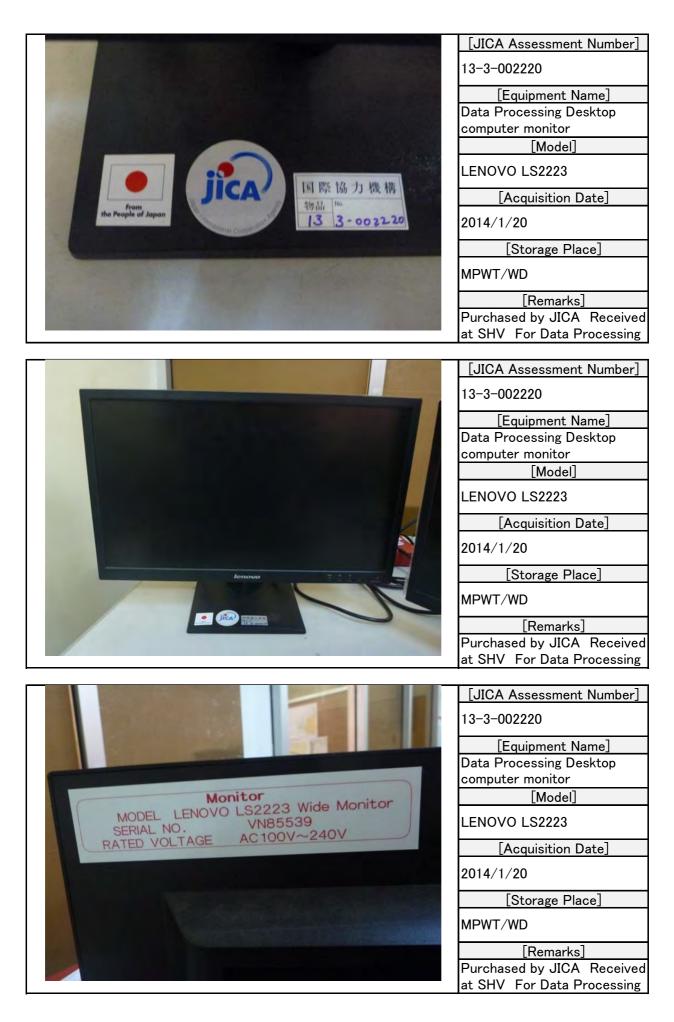
[Remarks] Purchased by JICA Received at SHV For Data Acqusition

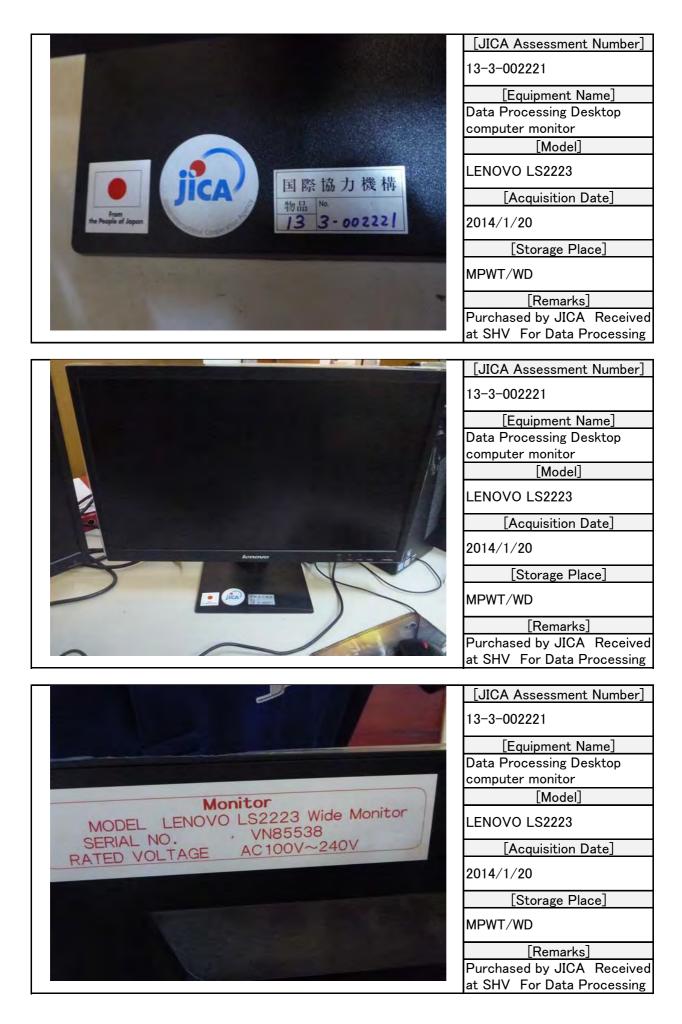


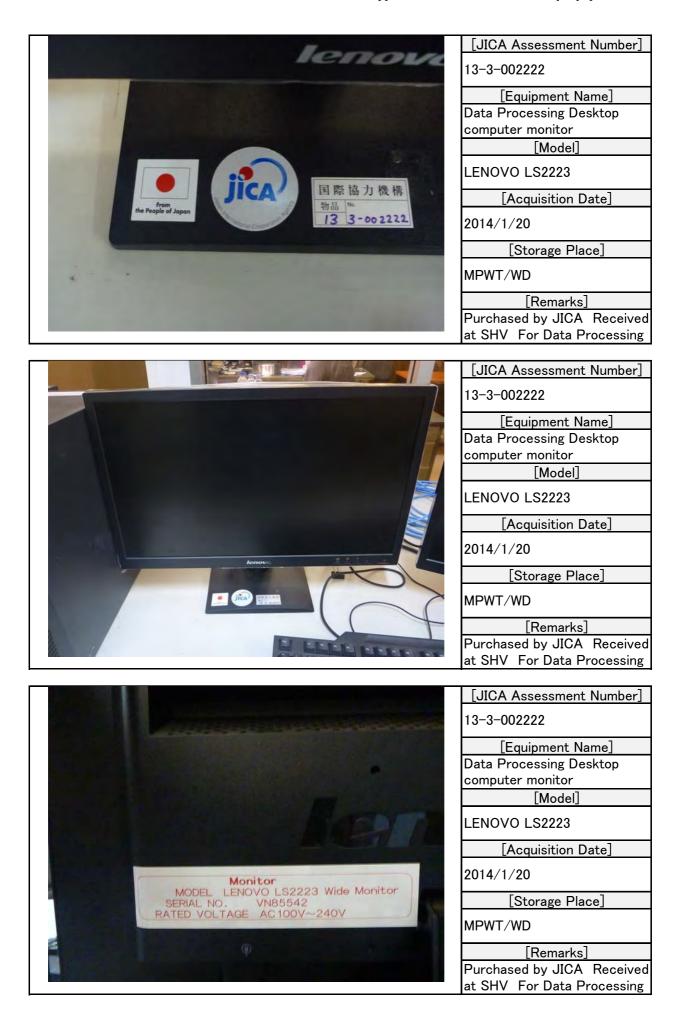


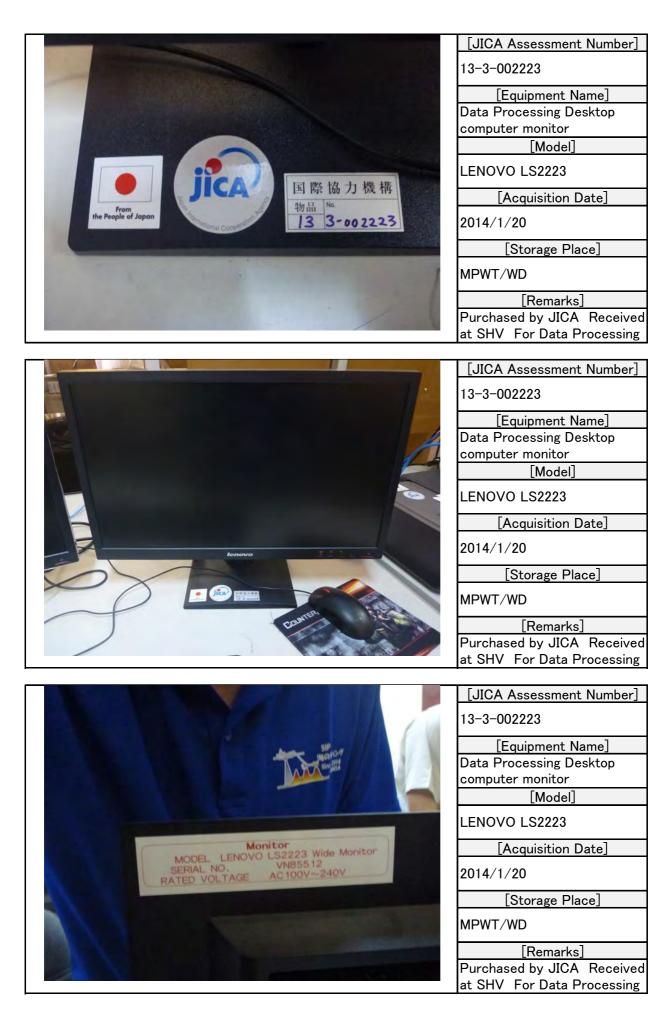






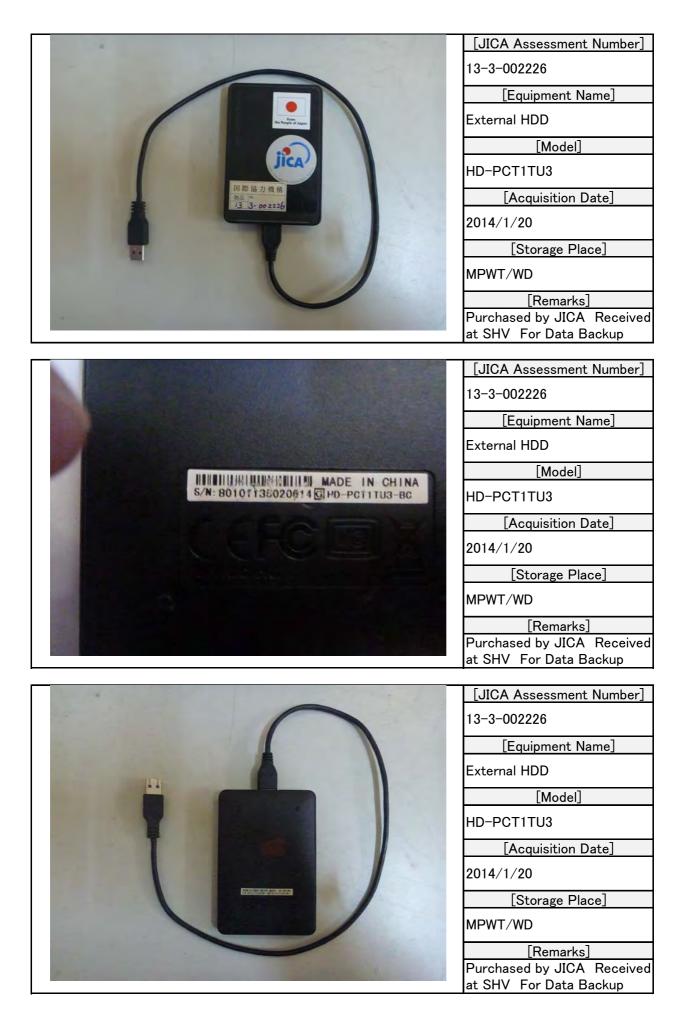


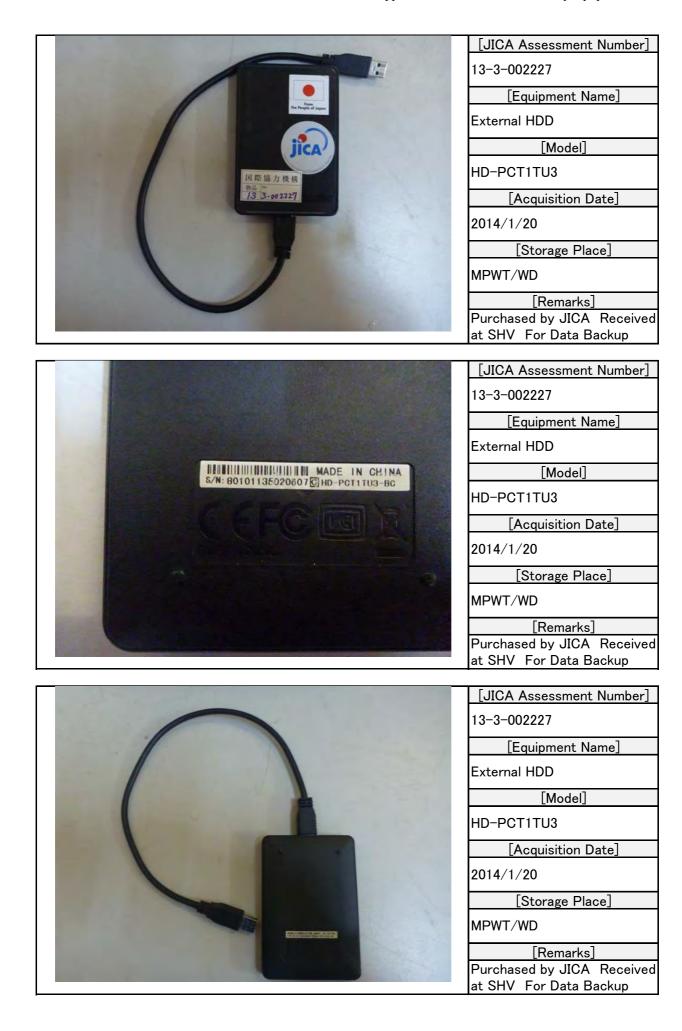












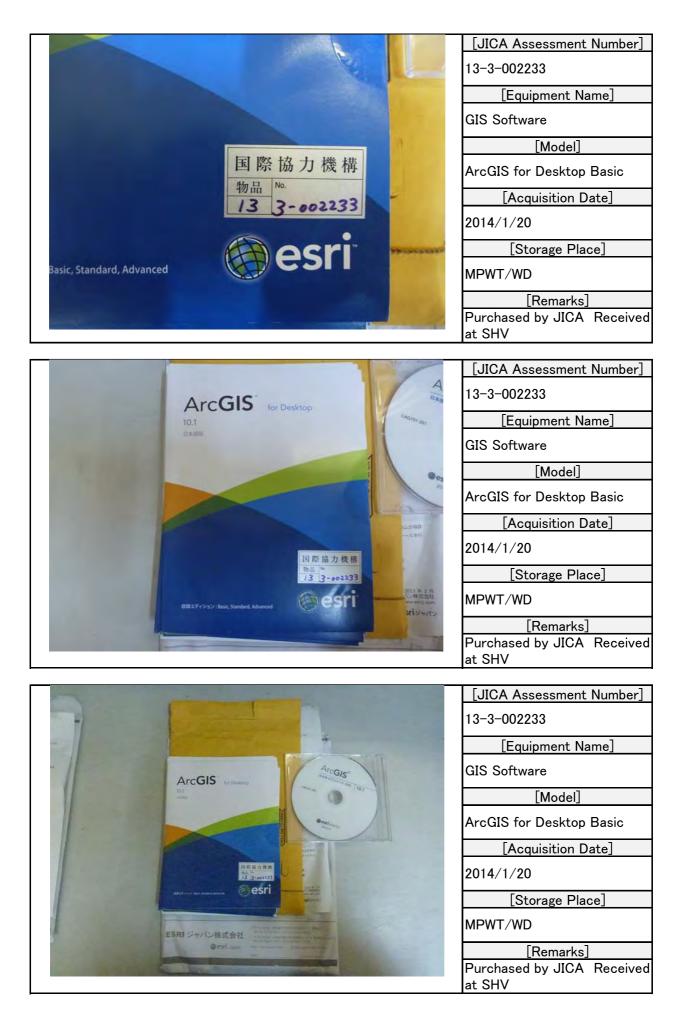






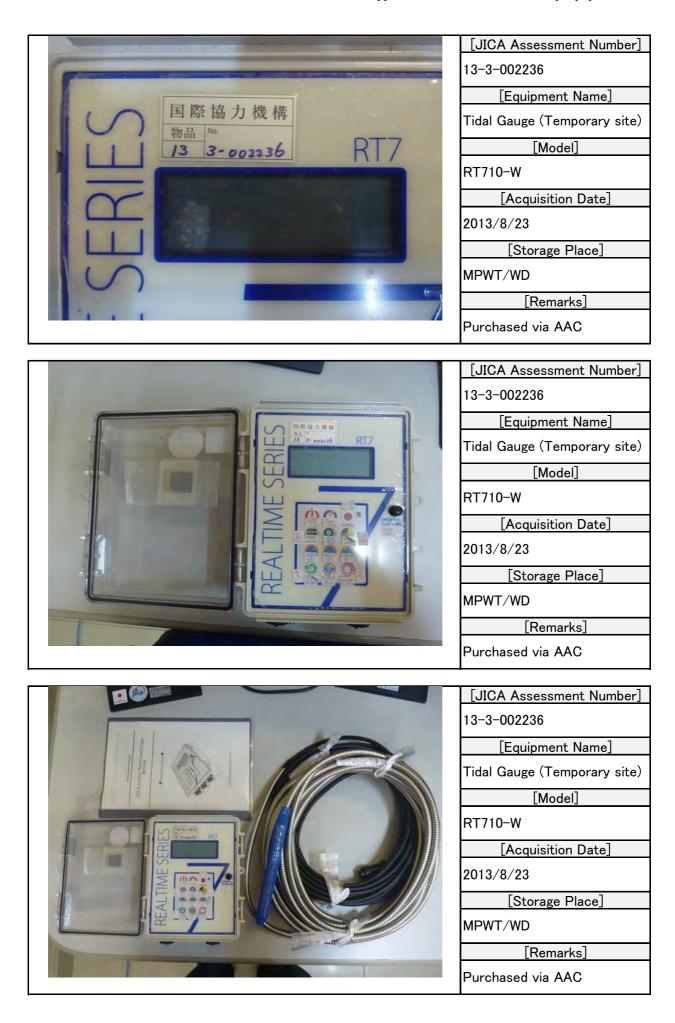


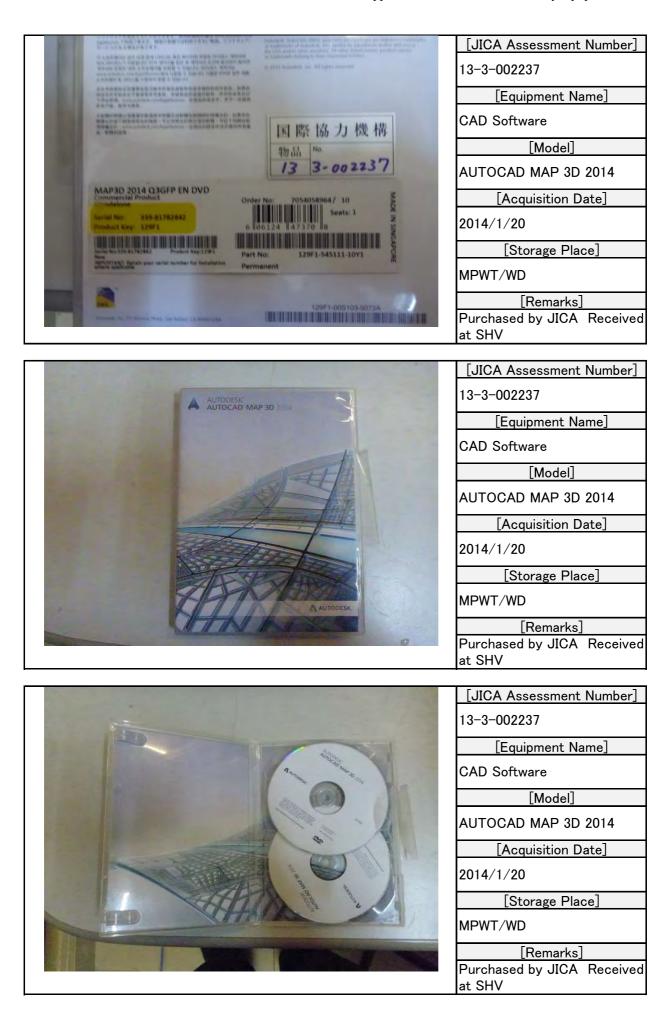




















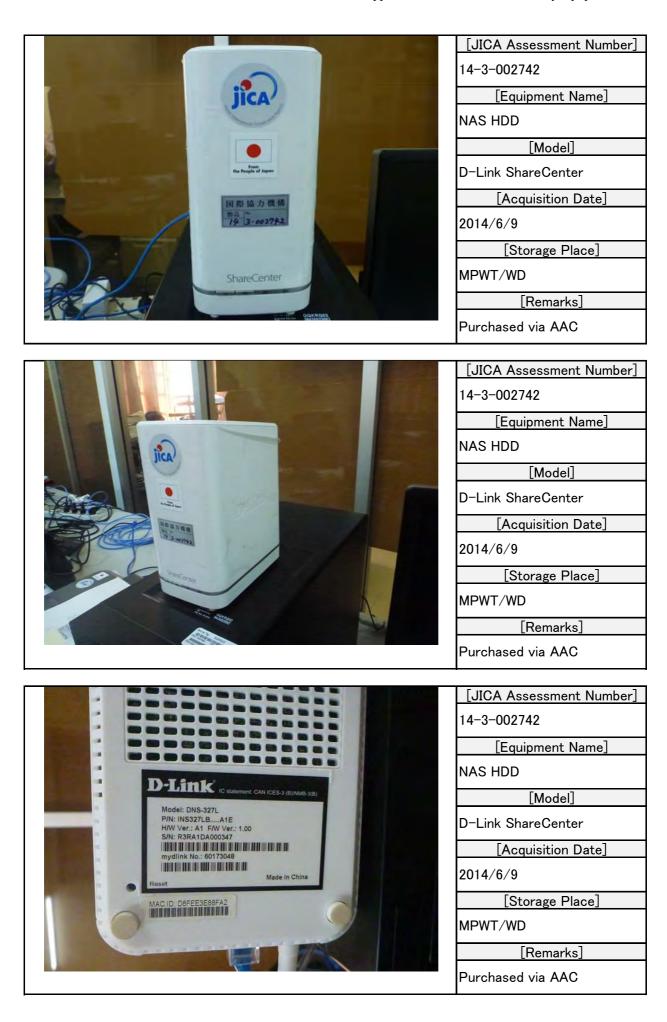




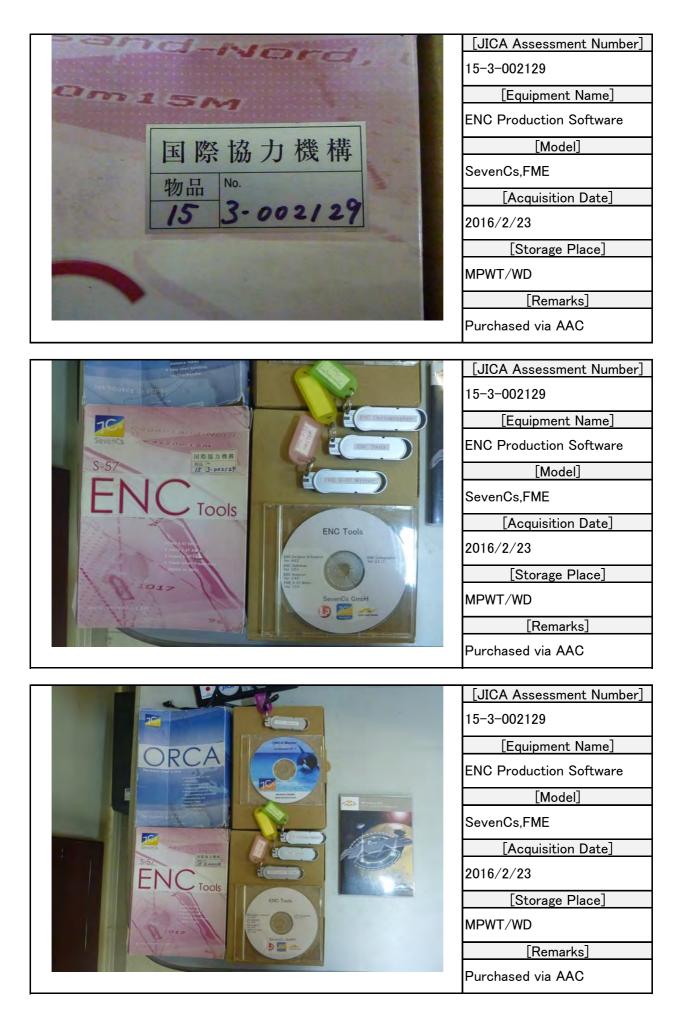


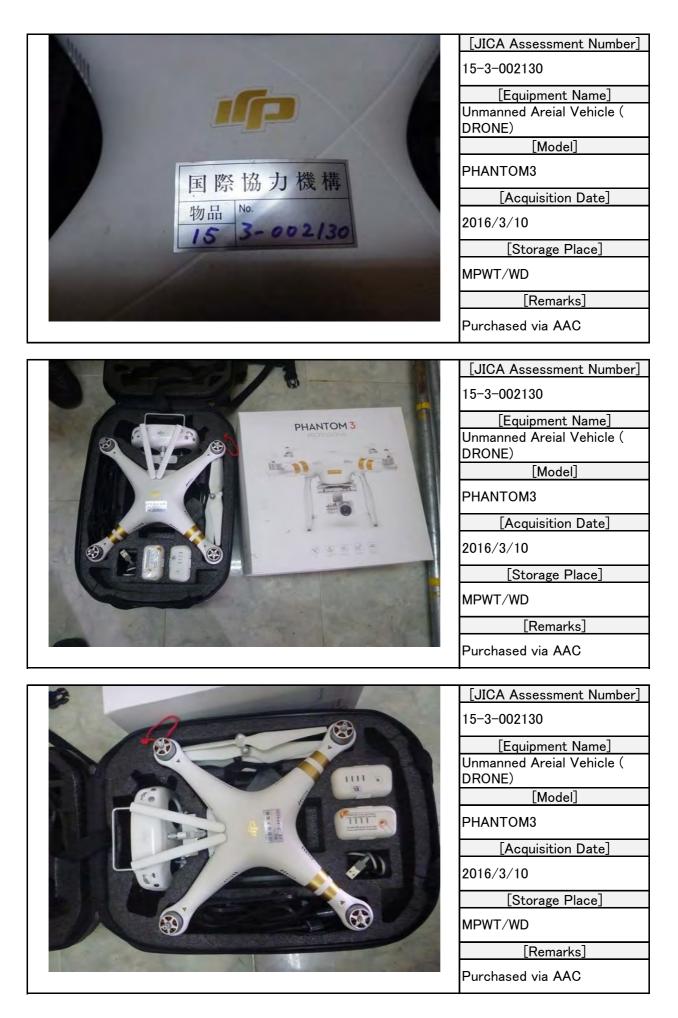
[JICA Assessment Number]
14-3-002741
[Equipment Name]
NAS Desktop computer
[Model]
DEILL OPTIPLEX 9020
[Acquisition Date]
2015/2/11
[Storage Place]
MPWT/WD
[Remarks]
Purchased via AAC

[JICA Assessment Number]
14-3-002741
[Equipment Name]
NAS Desktop computer
[Model]
DEILL OPTIPLEX 9020
[Acquisition Date]
2015/2/11
[Storage Place]
MPWT/WD
[Remarks]
Purchased via AAC









		Cambodia ENC 2014 - Sihanoukville harbor and s	urroundings				
	Questionnaire o	f Understanding Level in Technology Transfer at 2nd EN	VC training i	n Japan ai	nd Philippin	ne	
ne:		A second s	Date :	28 Jul	y 2014	~	23 Aug 2014
	Technology T	for Ti-	Understand	ing Level (F	lease put cl	heck mark)	
	Technology T	ranster Topic	Excellent	Good	Fair	Poor	Comments
		Digitizing Point-Line-Area for ENC (Geometry)		V			
		Editing and managing Node-Edge	1	V.			
ENC Tools		Creating and changing S-57 bject and attribute		V			
	ENC Designer	Managing ENC (filter, duplicate)		V			
		Using Raster image in ENC Designer		V			
		Correcting errors and warnings from ENC Analyzer		V			
	ENC Analyzer	Checking error and warning		V	1		
	ENC Optimizer	Optimizing ENC file		V.			
	ENC Referencer	Mapping raster image and creating .ref file		~			
1	ENC Manager	Creating exchange set		V	1.000	1.1	
		Updating ENC		V			
	ENC Cartographer	Producing paper chart from ENC		~			
	ENC Cartographer	Plotting paper chart		~	()		
FME Tools	FME S-57 Writer	Transforming CSV, DWG etc. to S-57 objects and attributes			~		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Making data flow and relation in FME			~	-	
	ORCA Master	Display and explore ENC file in ECDIS system			~		
in the second	UNCA Master	Simulating ECDIS system (ship movement sound caution)			V		
ETC.	ENC CD	Creating and checking ENC CD (Edition and Update)		~			
	Technical visit	Learning about process of making nautical chart and ENC in NAMRIA		~			

Signature -22 August 2014 Date

MAK. SAN	INANG	f Understanding Level in Technology Transfer at 2nd EN	Date :	28 Jul		~	23 Aug 2014
	Taskaslass T	C T T	Understand	ling Level (F	lease put cl	heck mark)	
	Technology T	ranster Topic	Excellent	ellent Good		Poor	Comments
		Digitizing Point-Line-Area for ENC (Geometry)		V			
		Editing and managing Node-Edge		V			
ENC Tools	ENC Designer	Creating and changing S-57 bject and attribute		~			
		Managing ENC (filter, duplicate)		V			
		Using Raster image in ENC Designer		V			
		Correcting errors and warnings from ENC Analyzer					
	ENC Analyzer	Checking error and warning	V				
	ENC Optimizer	Optimizing ENC file	V				
	ENC Referencer	Mapping raster image and creating .ref file		V		1000	
	ENC Manager	Creating exchange set		V			
		Updating ENC	V	1			
1	ENC Cartographer	Producing paper chart from ENC	V		1		
	ENC Cartographer	Plotting paper chart	V			1	
ME Tools	FME S-57 Writer	Transforming CSV. DWG etc. to S-57 objects and attributes		$\checkmark$			
		Making data flow and relation in FME		V			
	ORCA Master	Display and explore ENC file in ECDIS system	V		1	0.2	
ETC.	UndA Master	Simulating ECDIS system (ship movement sound caution)	V				
	ENC CD	Creating and checking ENC CD (Edition and Update)	V			-	

Voos 0, Signature 22. Aug 2014 Date

BUS SUVO	unarith		Date :	15 DEC		~	19 DEC 2014
	Technology Tra	ansfer Topic	Understand	-		Comments	
		Sonic2020 transducer and Micro X Installation- Uninstallation	Excellent	Good	Fair	Poor	
		DGPS positioning and heading system Installation- Uninstallation		V			
	Hydrographic Survey Data Acquisition	Motion sensor Installation-Uninstallation		V			
Hydrographic Survey		SIM-Junction box-GPS receiver-Computer equipment cable connecting		V			
		Prepare HYPACK project (Geodetic-Hardware Setup. Plan line, MTX) to do Data acquisition		V		1	
		HYPACK Survey and HYSWEEP Survey usage during Data accuistion	~				
		SONIC control 2000 usage during Data acquisition	V		-		
		Using Minos X SVP for Sound velocity profiling		V			
		Practical Navigation with crews		V			
		Seafloor sampling	V				
	Tidal Observation	Temporary Tide gauge Installation-Uninstallation	V	1			
	Hdal Observation	Temporary Tide gauge data saving and backup		N			
	L	Tripod setting for leveling	V	1			
	Leveling	Calculate the tollerance accuracy		V			
Land Survey		Tripod setting for GNSS observation		V		1	
	GNSS Observation	GNSS setting and using centroller (Leica 1230 and Topcon HiPerII)		1	6		
		Computing positioning and height of unknown point from observation data processing by GrafNet		1			

RSA Signature 22 0 2011 Date

. SOK VI	ANTONK		Date :		V 2014	~	19 DEC 2014
	Technology Tran	ofor Topic	Understand	ding Level (	heck mark)	Comments	
	Technology Trans	ster Topic	Excellent	Good	Fair	Poor	Commence
		Sonic2020 transducer and Micro X Installation- Uninstallation		V			
Hydrographic Survey		DGPS positioning and heading system Installation- Uninstallation		5			
		Motion sensor Installation-Uninstallation		V			
		SIM-Junction box-GPS receiver-Computer equipment cable connecting	4 - 2.11	V			
	Hydrographic Survey Data Acquisition	Prepare HYPACK project (Geodetic-Hardware Setup, Plan line, MTX) to do Data acquisition		ン			
	Data Acquisition	HYPACK Survey and HYSWEEP Survey usage during Data acquistion		12			
		SONIC control 2000 usage during Data acquisition		V			
		Using Minos X SVP for Sound velocity profiling		1			
		Practical Navigation with crews			V		
		SB system data acquisition			V		
		SB bar check			V		
	Tidal Observation	Temporary Tide gauge Installation-Uninstallation		1			
		Temporary Tide gauge data saving and backup		5			
		Relation between Hydrographic survey - Tidal observation - Land survey	-	L			
		ADCP sytem with GPS Installing-Uninstalling		Y			
ADCP	ADCP	ADCP Setup by SonUtility			×		
ADOF	Data acquisition and processing	ADCP data acquisition by CurrentSurveyor			14		
		ADCP data processing by CurrentSurveyor					
	Leveling	Tripod setting for leveling		L			
		Calculate the tollerance accuracy		1			
Land		Tripod setting for GNSS observation		V			
Land Survey	GNSS Observation	GNSS setting and using controller (Leica 1230 and Topcon HiPerII) Computing positioning and height of unknown point from		V			

EK Signature

Date 22 12 2014

. Morn		Questionnaire of Understanding Level in Techno	Date :		V 2014	~	19 DEC 2014
			Understand	11.11			19 000 2014
	Technology Tran	sfer Topic	Excellent	Good	Fair	Poor	Comments
		Sonic2020 transducer and Micro X, Installation- Uninstallation		V			
Hydrographic		DGPS positioning and heading system Installation- Uninstallation		V			
		Motion sensor Installation-Uninstallation		V		1	
		SIM-Junction box-GPS receiver-Computer equipment cable connecting		V			
	Hydrographic Survey Data Acquisition	Prepare HYPACK project (Geodetic-Hardware Setup, Plan line, MTX) to do Data acquisition		V			
		HYPACK Survey and HYSWEEP Survey usage during Data acquistion		~			
Survey		SONIC control 2000 usage during Data acquisition		V			
		Using Minos X SVP for Sound velocity profiling		V			
		Practical Navigation with crews		1	V		
		SB system data acquisition		V			
		SB bar check		~		1 m	
	Tidal Observation	Temporary Tide gauge Installation-Uninstallation		V			
		Temporary Tide gauge data saving and backup		V			
		Relation between Hydrographic survey - Tidal observation - Land survey		~			
		ADOP sytem with GPS Installing-Uninstalling		~	1		
ADCP	ADCP	ADCP Setup by SonUtility	-	V			
ADOF	Data acquisition and processing	ADCP data acquisition by CurrentSurveyor		V		-	
		ADCP data processing by CurrentSurveyor		V			
	Leveling	Tripod setting for leveling		V			
		Calculate the tollerance accuracy		V			
Land		Tripod setting for GNSS observation		V	1		
Survey	GNSS Observation	GNSS setting and using controller (Leice 1230 and Topcon HiPerII)		~			
		Computing positioning and height of unknown point from observation data processing by GrafNet		V			

land Signature 22- Dec-2014. Date

ne: LUNG	BUNLONG.		Date :	17 NC	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	~	19 DEC 2014	
	Technology Tran	sfer Topic	Understanding Level (Please put check mark)					
	rechnology fran		Excellent	Good	Fair	Poor	Comments	
		Sonic2020 transducer and Micro X. Installation- Uninstallation		~				
		DGPS positioning and heading system Installation- Uninstallation		V				
		Motion sensor Installation-Uninstallation		V				
Hydrographic		SIM-Junction box-GPS receiver-Computer equipment cable connecting		V				
	Hydrographic Survey Data Acquisition	Prepare HYPACK project (Geodetic-Hardware Setup, Plan line, MTX) to do Data acquisition		V				
		HYPACK Survey and HYSWEEP Survey usage during Data acquistion		1				
Survey		SONIC control 2000 usage during Data acquisition		V	1			
		Using Minos X SVP for Sound velocity profiling		V.	-			
		Practical Navigation with crews		~				
		SB system data acquisition		V	,			
		SB bar check		E.	$\checkmark$			
	Tidal Observation	Temporary Tide gauge Installation-Uninstallation		-	V			
		Temporary Tide gauge data saving and backup		V				
		Relation between Hydrographic survey - Tidal observation - Land survey			~			
		ADCP sytem with GPS Installing-Uninstalling			V			
ADCP	ADCP	ADCP Setup by SanUtility			V,			
ADDI	Data acquisition and processing	ADCP data acquisition by CurrentSurveyor			~			
	-	ADCP data processing by CurrentSurveyor		/	V			
	Leveling	Tripod setting for leveling		7	-			
		Calculate the tollerance accuracy						
Land		Tripod setting for GNSS observation		~				
Survey	GNSS Observation	GNSS setting and using controller (Leica 1230 and Topcon HiPerII) Computing positioning and height of unknown point from		~				

RAP Signature

22/Dec/2014. Date

AN. VO	THEA	Cambodia ENC 2014 - Sihanoukville harbor and Questionnaire of Understanding Level in Techno	- and the decide	er			
me: M/ ·· Vu	men		Date :	1.7.7	C 2014	~	19 DEC 2014
	Technology Tra	ansfer Topic	Understand		1	Comments	
		Sonic2020 transducer and Micro X Installation- Uninstallation	Excellent	Good	Fair	Poor	
	Hydrographic Survey Data Acquisition	DGPS positioning and heading system Installation- Uninstallation	V				
		Motion sensor Installation-Uninstallation		V	1		
Hydrographic Survey		SIM-Junction box-GPS receiver-Computer equipment cable connecting					
		Prepare HYPACK project (Geodetic-Hardware Setup, Plan line, MTX) to do Data acquisition	V				
		HYPACK Survey and HYSWEEP Survey usage during Data acquistion		V			
		SONIC control 2000 usage during Data acquisition		V			
		Using Minos X SVP for Sound velocity profiling		V.	4		
		Practical Navigation with crews		V	1		
		Seafloor sampling		V			
	Tidal Observation	Temporary Tide gauge Installation-Uninstallation		V			
	Indai Observation	Temporary Tide gauge data saving and backup	V				
	Later Park	Tripod setting for leveling	V		-		
	Leveling	Calculate the tollerance accuracy		V			
Land Survey		Tripod setting for GNSS observation		V			
	GNSS Observation	GNSS setting and using controller (Leica 1230 and Topcon HiPerII)		1			
	and observation	Computing positioning and height of unknown point from observation data processing by GrafNet		1			

22-12-2014 Signature Date

MARS	AMNHNE	Questionnaire of Understanding Level in Techno	Date :	15 DE(	C 2014	~	19 DEC 2014
	Technology Tra	motor Tenio	Understand	ing Level (F	heck mark)	Comments	
	Technology Th	ansier Topic	Excellent	Good	Fair	Poor	Comments
		Sonic2020 transducer and Micro X Installation- Uninstallation		V			
		DGPS positioning and heading system Installation- Uninstallation	V	1			
		Motion sensor Installation-Uninstallation		V			
Hydrographic Survey	Hydrographic Survey Data Acquisition	SIM-Junction box-GPS receiver-Computer equipment cable connecting		V		· · · · ·	
		Prepare HYPACK project (Geodetic-Hardware Setup, Plan line, MTX) to do Data acquisition	$\checkmark$				
		HYPACK Survey and HYSWEEP Survey usage during Data acquistion		V			
		SONIC control 2000 usage during Data acquisition		V	1		
		Using Minos X SVP for Sound velocity profiling	1	V			
		Practical Navigation with crews	VI				
		Seafloor sampling	V	1			
	Tidal Observation	Temporary Tide gauge Installation-Uninstallation		V			
	Tidal Observation	Temporary Tide gauge data saving and backup		V			
		Tripod setting for leveling	1	V		1	
	Leveling	Calculate the tollerance accuracy		VI			
1		Tripod setting for GNSS observation		V,		C	
Land Survey	GNSS Observation	GNSS setting and using controller (Leica 1230 and Topcon HiPerII)		V			
100 M		Computing positioning and height of unknown point from observation data processing by GrafNet		V			

Vas Signature -12-2014 Date

. CHATMR.	ASMEY		Date :	15 DEC	3 2014	~	19 DEC 2014
		anafar Tania	Understand	ing Level (P	check mark)	Comments	
	Technology Tra	ansier Topic	Excellent	Good	Fair	Poor	Commence
		Sonic2020 transducer and Micro X Installation- Uninstallation		V			
		DGPS positioning and heading system Installation- Uninstallation		~			
	Hydrographic Survey Data Acquisition	Motion sensor Installation-Uninstallation		V	-	· · · · · · · · · · · · · · · · · · ·	
Hydrographic Survey		SIM-Junction box-GPS receiver-Computer equipment cable connecting		1			
		Prepare HYPACK project (Geodetic-Hardware Setup, Plan line, MTX) to do Data acquisition		V	1		
		HYPACK Survey and HYSWEEP Survey usage during Data acquistion		V,			
		SONIC control 2000 usage during Data acquisition		V,			
		Using Minos X SVP for Sound velocity profiling	1	1		1	
		Practical Navigation with crews		1			
		Seafloor sampling		~			
	Tidal Observation	Temporary Tide gauge Installation-Uninstallation		V			
	Tidal Observation	Temporary Tide gauge data saving and backup		V			
	1P.	Tripod setting for leveling		V			
	Leveling	Calculate the tollerance accuracy		/			
1 and		Tripod setting for GNSS observation		1			
Land Survey	GNSS Observation	GNSS setting and using controller (Leica 1230 and Topcon HiPerII)		V			
		Computing positioning and height of unknown point from observation data processing by GrafNet		~			

Signature (In Date 0

ie: 11/ L	HANNA		Date :		V 2014	~	19 DEC 2014
	Technology Tran	ofer Tania	Understand	ding Level (	heck mark)	Comments	
	rechnology fran	ster topic	Excellent	Good	Fair	Poor	Comments
		Sonic2020 transducer and Micro X Installation- Uninstallation		V			
		DGPS positioning and heading system Installation- Uninstallation		VI			
		Motion sensor Installation-Uninstallation		V			
Hydrographic		SIM-Junction bax-GPS receiver-Computer equipment cable connecting		V			
	Hydrographic Survey Data Acquisition	Prepare HYPACK project (Geodetic-Hardware Setup, Plan line, MTX) to do Data acquisition	~				
		HYPACK Survey and HYSWEEP Survey usage during Data acquistion	V				
Survey		SONIC control 2000 usage during Data acquisition	V	1			
		Using Minos X SVP for Sound velocity profiling		V			
		Practical Navigation with crews		VI			
		SB system data acquisition		VI			
		SB bar check		V			
	Tidal Observation	Temporary Tide gauge Installation-Uninstallation		V			
		Temporary Tide gauge data saving and backup		VI			
	That Observation	Relation between Hydrographic survey - Tidal observation - Land survey		V	,		
		ADCP sytem with GPS Installing-Uninstalling			V		
ADCP	ADCP	ADCP Setup by SonUtility			VI		
ADOF	Data acquisition and processing	ADCP data acquisition by CurrentSurveyor			V		
		ADCP data processing by CurrentSurveyor			V		
	Leveling	Tripad setting for leveling		V/			
		Calculate the tollerance accuracy		V			
Land		Tripod setting for GNSS observation		V			
Survey	GNSS Observation	GNSS setting and using controller (Leica 1230 and Topcon HiPerII)		/			
		Computing positioning and height of unknown point from observation data processing by GrafNet		V			

Signature <u>Club</u> Date <u>22.12.2014</u> Signature

01111	R I	Cambodia ENC 2014 - Sihanoukville harbour and Questionnaire of Understanding Level in Techno		~			
Solk Va	nnall		Date :	16 FE	B 2015	~	10 APR 2015
	Technology Tr	renafar Tonia	Understand	ling Level	(Please put	check mark)	Comments
	Technology Tr	ansier ropic	Excellent	Good	Fair	Poor	oominicita
		Convert csv data (ASCII) to S-57 format		V			
	FME S-57 Writer	Converting CSV file (ASCII) to S-57 format format (Point Primitive)		V			
		Converting DWG file (VECTOR) to S-57 format (Line & Area Primitive)		$\checkmark$			
	ENC Referencer	Mapping image file (RASTER) to generate .ref file for using as the background in ENC Designer		~			
1		Loading Raster image file to use as the background		V			
		Creating new cell and set for cell information (Compilation scale, Producer code, Cell code etc.)			V		
		Combining FME converted ENC cell files to ENC cell by duplicate		V			
		Editing Spatial object (isolated node, combined node, edge)			~		
ENC Production	ENC Designer	Creating & Editing Feature object (DEPCNT, DEPARE, LNDARE, BUISLG, BOYXXX, LIGHTS, TOPMAR, M_COVR, M_NSYS, C_AGGR etc.)			~		
		Creating & Editing object attribute (CATCAM, COLOUR, VALDCO, BOYSHP, CONVIS, DRVAL1, LIGHTS, TOPMAR, M_COVR, M_NSYS, C_AGGR etc.)		V			
		Creating Relationship between Feature object (Master/Slave, Peer to Peer)			$\checkmark$		
-		Digitizing create ENC cell data from existing paper chart		V			
	ENC Optimizer	Optimizing created ENC cell data			~		
	ENC Analyzer	Analyzing and Checking validation of created ENC cell data with S-57 specification			V		
F	ENC Manager	Creating exchange set for ENC CD			V		
F		Greating & Editing paper chart layout file		V			
	ENC Cartographer	Plotting paper chart		V			

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Date 20.04.2015

Appendix 10 : Technology transfer questionnaires

AAC

Chhim MORN.

ne :			Date :	16 FE	~	10 APR 2015	
	Table T	to Table	Understand	ding Level (	Please put o	check mark)	0
	Technology T	ransfer lopic	Excellent	Good	Fair	Poor	Comments
		Convert csv data (ASCII) to S-57 format			V		
	FME S-57 Writer	Converting CSV file (ASCII) to S-57 format format (Point Primitive)			V		
		Converting DWG file (VECTOR) to S-57 format (Line & Area Primitive)			V		
	ENC Referencer	Mapping image file (RASTER) to generate .ref file for using as the background in ENC Designer		V			
E E		Loading Raster image file to use as the background	1	V			
		Creating new cell and set for cell information (Compilation scale, Producer code, Cell code etc.)		V			
		Combining FME converted ENC cell files to ENC cell by duplicate		V			
1.00	ENC Designer	Editing Spatial object (isolated node, combimed node, edge)		V			
ENC Production		Creating & Editing Feature object (DEPCNT, DEPARE, LNDARE, BUISLG, BOYXXX, LIGHTS, TOPMAR, M COVR, M_NSYS, C_AGGR etc.)		V			
		Creating & Editing object attribute (CATCAM, COLOUR, VALDCO, BOYSHP, CONVIS, DRVAL1, LIGHTS, TOPMAR, M_COVR, M_NSYS, C_AGGR etc.)			~		
		Creating Relationship between Feature object (Master/Slave, Peer to Peer)			V		
		Digitizing create ENC cell data from existing paper chart		V			
	ENC Optimizer	Optimizing created ENC cell data			V	1000	
	ENC Analyzer	Analyzing and Checking validation of created ENC cell data with S-57 specification			1		
F	ENC Manager	Creating exchange set for ENC CD			V	1. A.	
F		Creating & Editing paper chart layout file		V			
	ENC Cartographer	Plotting paper chart	1	V			

ma Signature Date 22-04-2015.

	NLONG.		Date : 16 FEB 20		B 2015	~	10 APR 2015
	Technology T	ransfer Tonic	Understand	ling Level (	Please put	check mark)	Comments
	rediniology in		Excellent	Good	Fair	Poor	
		Convert csv data (ASCII) to S-57 format		V			
	FME S-57 Writer	Converting CSV file (ASCII) to S-57 format format (Point Primitive)		$\checkmark$			
		Converting DWG file (VECTOR) to S–57 format (Line & Area Primitive)		~			
	ENC Referencer	Mapping image file (RASTER) to generate .ref file for using as the background in ENC Designer		$\checkmark$			
Γ		Loading Raster image file to use as the background		~			
		Creating new cell and set for cell information (Compilation scale, Producer code, Cell code etc.)	1	$\checkmark$			
		Combining FME converted ENC cell files to ENC cell by duplicate		$\checkmark$			
	ENC Designer	Editing Spatial object (isolated node, combimed node, edge)		$\checkmark$			
ENC Production		Creating & Editing Feature object (DEPCNT. DEPARE, LNDARE. BUISLG, BOYXXX, LIGHTS, TOPMAR, M_COVR, M_NSYS, C_AGGR etc.)		$\checkmark$			
		Creating & Editing object attribute (CATCAM, COLOUR, VALDCO, BOYSHP, CONVIS, DRVAL1, LIGHTS, TOPMAR, M_COVR, M_NSYS, C_AGGR etc.)		V			
		Creating Relationship between Feature object (Master/Slave, Peer to Peer)		$\checkmark$			
F		Digitizing create ENC cell data from existing paper chart		$\checkmark$			
	ENC Optimizer	Optimizing created ENC cell data		$\vee$			
	ENC Analyzer	Analyzing and Checking validation of created ENC cell data with S–57 specification		$\checkmark$	,		
F	ENC Manager	Creating exchange set for ENC CD			V		
T I		Creating & Editing paper chart layout file		1			
	ENC Cartographer	Plotting paper chart		V			

BP. Signature Date 22 April 2015

: CHHIM RA	SMEY		Date :	10 FE	B 2015	~	10 APR 2015
	/ Technology Tr	repoter Topio	Understand	ding Level (	Please put	check mark)	Comments
	rechnology n		Excellent	Good	Fair	Poor	
		Convert csv data (ASCII) to S-57 format		V			
	FME S-57 Writer	Converting CSV file (ASCII) to S-57 format format (Point Primitive)		V			
		Converting DWG file (VECTOR) to S=57 format (Line & Area Primitive)		V			
	ENC Referencer	Mapping image file (RASTER) to generate .ref file for using as the background in ENC Designer		1			
		Loading Raster image file to use as the background		V			
		Creating new cell and set for cell information (Compilation scale, Producer code, Cell code etc.)		V			
		Combining FME converted ENC cell files to ENC cell by duplicate		$\sim$			
	ENC Designer	Editing Spatial object (isolated node, combimed node, edge)		V			
ENC Production		Creating & Editing Feature object (DEPCNT, DEPARE, LNDARE, BUISLG, BOYXXX, LIGHTS, TOPMAR, M_COVR, M_NSYS, C_AGGR etc.)		$\checkmark$			
		Creating & Editing object attribute (CATCAM, COLOUR, VALDCO, BOYSHP, CONVIS, DRVAL1, LIGHTS, TOPMAR, M_COVR, M NSYS, C_AGGR etc.)			~		
		Greating Relationship between Feature object (Master/Slave, Peer to Peer)		V			
-		Digitizing create ENC cell data from existing paper chart		~			
	ENC Optimizer	Optimizing created ENC cell data		~			
	ENC Analyzer	Analyzing and Checking validation of created ENC cell data with S-57 specification	1	~			
F	ENC Manager	Creating exchange set for ENC CD		V			
		Creating & Editing paper chart layout file					
	ENC Cartographer	Plotting paper chart	-	V			

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KY CHA	NNA	Questionnaire of Understanding Level in Technology	ology Trans Date :		3 2015	~	10 APR 2015
	Technology T	ranofor Tonio	Understan	ding Level (	Please put	check mark)	Comments
	rechnology n	ansier Topic	Excellent	Good	Fair	Poor	Comments
		Convert csv data (ASCII) to S-57 format					
	FME S-57 Writer	Converting CSV file (ASCII) to S-57 format format (Point Primitive)	V	1			
		Converting DWG file (VECTOR) to S–57 format (Line & Area Primitive)	$\vee$				
	ENC Referencer	Mapping image file (RASTER) to generate .ref file for using as the background in ENC Designer		V	1.001		
		Loading Raster image file to use as the background		1/			
		Greating new cell and set for cell information (Compilation scale, Producer code, Cell code etc.)		2			
		Combining FME converted ENC cell files to ENC cell by duplicate		V			
		Editing Spatial object (isolated node, combined node, edge)		V			
ENC Production	ENC Designer	Creating & Editing Feature object (DEPCNT, DEPARE, LNDARE, BUISLG, BOYXXX, LIGHTS, TOPMAR. M_COVR, M_NSYS, C_AGGR etc.)		V			
		Creating & Editing object attribute (CATCAM, COLOUR, VALDCO, BOYSHP, CONVIS, DRVAL1, LIGHTS, TOPMAR, M_COVR , M_NSYS, C_AGGR etc.)		V			
		Creating Relationship between Feature object (Master/Slave, Peer to Peer)		1/			
-		Digitizing create ENC cell data from existing paper chart		V			
	ENC Optimizer	Optimizing created ENC cell data		1/			
	ENC Analyzer	Analyzing and Checking validation of created ENC cell data with S-57 specification		V			
Ē	ENC Manager	Creating exchange set for ENC CD		V			
F		Creating & Editing paper chart layout file		1			
	ENC Cartographer	Plotting paper chart		1/			

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and wind	150	Cambodia ENC 2014 - Sihanoukville harbour and Questionnaire of Understanding Level in Techn	ology Trans	fer			
AN. VUTI	t BA		Date :		B 2015	~	10 APR 2015
	Technology T	ransfer Topic	Excellent	Good	Fair	check mark) Poor	Comments
		Convert csv data (ASCII) to S-57 format	LAGenerit	- dood	1 dii	F.001	
	FME S-57 Writer	Converting CSV file (ASCII) to S-57 format format (Point Primitive)		V			
		Converting DWG file (VECTOR) to S-57 format (Line & Area Primitive)	V				
	ENC Referencer	Mapping image file (RASTER) to generate .ref file for using as the background in ENC Designer	V				
		Loading Raster image file to use as the background		V			
		Creating new cell and set for cell information (Compilation scale, Producer code, Cell code etc.)		N			
		Combining FME converted ENC cell files to ENC cell by duplicate	V				
ALC: NO	ENC Designer	Editing Spatial object (isolated node, combimed node, edge)		v			
ENC Production		Creating & Editing Feature object (DEPCNT, DEPARE, LNDARE, BUISLG, BOYXXX, LIGHTS, TOPMAR, M_COVR, M_NSYS, C_AGGR etc.)	V	_			
		Creating & Editing object attribute (CATCAM, COLOUR, VALDCO, BOYSHP, CONVIS, DRVAL1, LIGHTS, TOPMAR, M COVR, M_NSYS, C_AGGR etc.)	v				
		Creating Relationship between Feature object (Master/Slave, Peer to Peer)		5			-
-		Digitizing create ENC cell data from existing paper chart		V			
	ENC Optimizer	Optimizing created ENC cell data		V			
	ENC Analyzer	Analyzing and Checking validation of created ENC cell data with S-57 specification	V				
Γ	ENC Manager	Creating exchange set for ENC CD	r				
Γ	ENO Osuta mentaria	Creating & Editing paper chart layout file	V				
	ENC Cartographer	Plotting paper chart	V				

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KOS. JOV	annarith		Date :	16 FEI	B 2015	~	10 APR 2015
	Technology T	ransfer Tonic	Understand	ding Level (	Please put	check mark)	Comments
	roomiology in		Excellent	Good	Fair	Poor	Contributed
		Convert csv data (ASCII) to S-57 format			V		
	FME S-57 Writer	Converting CSV file (ASCI) to S–57 format format (Point Primitive)			V		
		Converting DWG file (VECTOR) to S-57 format (Line & Area Primitive)			$\checkmark$		
1.2	ENC Referencer	Mapping image file (RASTER) to generate .ref file for using as the background in ENC Designer		~			
		Loading Raster image file to use as the background		V		S	
		Creating new cell and set for cell information (Compilation scale, Producer code, Cell code etc.)			~		
		Combining FME converted ENC cell files to ENC cell by duplicate			V		
0.1.0	ENC Designer	Editing Spatial object (isolated node, combimed node, edge)		V			
ENC Production		Creating & Editing Feature object (DEPCNT. DEPARE, LNDARE. BUISLG, BOYXXX, LIGHTS, TOPMAR, M_COVR, M_NSYS, C_AGGR etc.)		V			
		Creating & Editing object attribute (CATCAM, COLOUR, VALDCO, BOYSHP, CONVIS, DRVAL1, LIGHTS, TOPMAR, M_COVR, M_NSYS, C_AGGR etc.)		V			
		Creating Relationship between Feature object (Master/Slave, Peer to Peer)		V			
		Digitizing create ENC cell data from existing paper chart		~			
	ENC Optimizer	Optimizing created ENC cell data		~			
	ENC Analyzer	Analyzing and Checking validation of created ENC cell data with S-57 specification		V			
	ENC Manager	Creating exchange set for ENC CD		/			
F		Creating & Editing paper chart layout file		V			
	ENC Cartographer	Plotting paper chart		V			

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MAK SAI	MNANG		Date :	16 FE	B 2015	~	10 APR 2015
	Technology T	repeter Topio	Understand	ding Level (	Please put of	check mark)	Comments
	rechnology in	ansier Topic	Excellent	Good	Fair	Poor	Comments
		Convert csv data (ASCII) to S-57 format		$\checkmark$			
	FME S-57 Writer	Converting CSV file (ASCII) to S-57 format format (Point Primitive)	V				
		Converting DWG file (VECTOR) to S-57 format (Line & Area Primitive)		$\checkmark$			
	ENC Referencer	Mapping image file (RASTER) to generate .ref file for using as the background in ENC Designer	$\checkmark$				
		Loading Raster image file to use as the background		V			
		Creating new cell and set for cell information (Compilation scale, Producer code, Cell code etc.)		~			
		Combining FME converted ENC cell files to ENC cell by duplicate		~			
		Editing Spatial object (isolated node, combined node, edge)		$\checkmark$			
ENC Production	ENC Designer	Creating & Editing Feature object (DEPCNT, DEPARE, LNDARE, BUISLG, BOYXXX, LIGHTS, TOPMAR, M_COVR, M_NSYS, C_AGGR etc.)	$\checkmark$				
		Creating & Editing object attribute (CATCAM, COLOUR, VALDCO, BOYSHP, CONVIS, DRVAL1, LIGHTS, TOPMAR, M_COVR, M_NSYS, C_AGGR etc.)	$\checkmark$				
		Creating Relationship between Feature object (Master/Slave, Peer to Peer)		~			
-		Digitizing create ENC cell data from existing paper chart		$\checkmark$			
	ENC Optimizer	Optimizing created ENC cell data		$\checkmark$			
	ENC Analyzer	Analyzing and Checking validation of created ENC cell data with S-57 specification	$\checkmark$				
Γ	ENC Manager	Creating exchange set for ENC CD		~			
F		Creating & Editing paper chart layout file		~			
	ENC Cartographer	Plotting paper chart		1			

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10/11/01/	0	Cambodia ENC 2014 – Sihanoukville harbour and su Questionnaire of Understanding Level in Technolo					
AN VUTHE	4		Date :	Aug 3	3,2015	~	Aug 27,2015
	Technology T	ransfer Tonio	Understan	ding Level (F	Please put ch	eck mark)	Comments
		ansier ropic	Excellent	Good	Fair	Poor	Comments
LAT Convert	LAT knowledge	Learning about LAT knowledge	V				
LAT Convert	HYPACK	Using XYZ Utility to shift Z0 data to LAT data	V				
	FME S-57 Writer	Convert additional data to S-57 format file.		V			
	ENC Referencer	Mapping image file (RASTER) from Indian 1960 to UTM 48N.		V			
		Correcting Critical, Error, Warning from ENC Analyzer result.		V		L	
	ENC Designer	Adding Moving or deleting depth sounding position in order to not to overlap with depth contour.		V			
ENC	ENC Optimizer	Applying Melting SOUNDING and setting SCAMIN with to optimize finished ENC cell data		V			
Production	ENC Analyzer	Analyzing and Checking validation of finished ENC cell data with S-57 specification.		V			
	ENO H	Creating ENC exchange set from ENC data cell.	1	V			
	ENC Manager	Buring ENC exchange set to CD-ROM.	V				
		Creating & Editing paper chart layout file.	V				
	ENC Cartographer	Checking paper chart with paper	V				
		Setting up plotter and plotting paper chart.	V				

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		Cambodia ENC 2014 - Sihanoukville harbour and s					
Ros Sovar	marith	Questionnaire of Understanding Level in Technolo	Date :		3,2015	~	Aug 27,2015
	Technology T	ransfar Tonia	Understar	iding Level (F	Please put ch	neck mark)	Comments
		anster Topic	Excellent	Good	Fair	Poor	Comments
LAT Convert	LAT knowledge	Learning about LAT knowledge		V			
LAT Convert	HYPACK	Using XYZ Utility to shift Z0 data to LAT data		V			
	FME S-57 Writer	Convert additional data to S-57 format file.		Z			
F	ENC Referencer	Mapping image file (RASTER) from Indian 1960 to UTM 48N.	V				
		Correcting Critical, Error, Warning from ENC Analyzer result.		V	1		
	ENC Designer	Adding Moving or deleting depth sounding position in order to not to overlap with depth contour.		V			
ENC	ENC Optimizer	Applying Melting SOUNDING and setting SCAMIN with to optimize finished ENC cell data		V			
Production	ENC Analyzer	Analyzing and Checking validation of finished ENC cell data with S-57 specification.		$\checkmark$			
	ENO Manage	Creating ENC exchange set from ENC data cell.		V			
	ENC Manager	Buring ENC exchange set to CD-ROM.		V			
		Creating & Editing paper chart layout file.		V	1		
	ENC Cartographer	Checking paper chart with paper	V				
		Setting up plotter and plotting paper chart.	V	1			

RSP Signature 26.08. 21 Date

		Cambodia ENC 2014 - Sihanoukville harbour and s					
CHHIM RE	ISMEY	Questionnaire of Understanding Level in Technolo	bgy Transfer Date :	Aug 3	,2015	~	Aug 27,2015
	Technology T	ranafar Tania	Understan	ding Level (F	lease put ch	neck mark)	Comments
	rechnology r	ransfer Topic	Excellent	Good	Fair	Poor	Comments
LAT Convert	LAT knowledge	Learning about LAT knowledge	1	V			
LAT Convert	HYPACK	Using XYZ Utility to shift Z0 data to LAT data		V			
	FME S-57 Writer	Convert additional data to S-57 format file.		V			
	ENC Referencer	Mapping image file (RASTER) from Indian 1960 to UTM 48N.		V	1		
		Correcting Critical, Error, Warning from ENC Analyzer result.					
	ENC Designer	Adding Moving or deleting depth sounding position in order to not to overlap with depth contour.		~			
ENC	ENC Optimizer	Applying Melting SOUNDING and setting SCAMIN with to optimize finished ENC cell data		V			
Production	ENC Analyzer	Analyzing and Checking validation of finished ENC cell data with S-57 specification.		V			
	ENG N	Creating ENC exchange set from ENC data cell.		V			
	ENC Manager	Buring ENC exchange set to CD-ROM.					
	and the second second	Creating & Editing paper chart layout file.		1			
	ENC Cartographer	Checking paper chart with paper		VI			
		Setting up plotter and plotting paper chart.		./			

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KYCL	ranna	Cambodia ENC 2014 – Sihanoukville harbour and s Questionnaire of Understanding Level in Technolo	ogy Transfer				
P M	anna		Date :		3,2015	~	Aug 27,2015
	Technology T	ransfer Topic	Excellent	Good	Please put ch Fair	Poor	Comments
	LAT knowledge	Learning about LAT knowledge		/			
LAT Convert	HYPACK	Using XYZ Utility to shift Z0 data to LAT data	V				
	FME S-57 Writer	Convert additional data to S-57 format file.	V			1	
F	ENC Referencer	Mapping image file (RASTER) from Indian 1960 to UTM 48N.		V			
	and a second	Correcting Critical, Error, Warning from ENC Analyzer result.		V			
	ENC Designer	Adding Moving or deleting depth sounding position in order to not to overlap with depth contour.	V				
ENC	ENC Optimizer	Applying Melting SOUNDING and setting SCAMIN with to optimize finished ENC cell data			V		
Production	ENC Analyzer	Analyzing and Checking validation of finished ENC cell data with S-57 specification.		V			
-	ENO Margan	Creating ENC exchange set from ENC data cell.			V		
	ENC Manager	Buring ENC exchange set to CD-ROM.			V	1	
		Creating & Editing paper chart layout file.	V	1			
	ENC Cartographer	Checking paper chart with paper		V	1		
		Setting up plotter and plotting paper chart.	1.1.1	1/	S		

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Date

	10	Cambodia ENC 2014 - Sihanoukville harbour and si Questionnaire of Understanding Level in Technolo					
LONG BUNL	ong		Date :	Aug 3	.2015	~	Aug 27,2015
	Technology T	ransfer Tonia	Understan	ding Level (F	Please put ch	neck mark)	Comments
	rechnology r	ransier ropic	Excellent	Good	Fair	Poor	oomments
LAT Convert	LAT knowledge	Learning about LAT knowledge	-	V			
LAT Convert	HYPACK	Using XYZ Utility to shift Z0 data to LAT data		$\checkmark$			
	FME S-57 Writer	Convert additional data to S-57 format file.		~			
	ENC Referencer	Mapping image file (RASTER) from Indian 1960 to UTM 48N.	-	V			
		Correcting Critical, Error, Warning from ENC Analyzer result.	(C)	V			
	ENC Designer	Adding Moving or deleting depth sounding position in order to not to overlap with depth contour.		$\checkmark$			
ENC	ENC Optimizer	Applying Melting SOUNDING and setting SCAMIN with to optimize finished ENC cell data		~			
Production	ENC Analyzer	Analyzing and Checking validation of finished ENC cell data with S-57 specification.		$\checkmark$			
	ENO M	Creating ENC exchange set from ENC data cell.		V			
	ENC Manager	Buring ENC exchange set to CD-ROM.		V	1		
		Greating & Editing paper chart layout file.		V,			
	ENC Cartographer	Checking paper chart with paper		V		1000	
		Setting up plotter and plotting paper chart.		V			

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Date

		Cambodia ENC 2014 - Sihanoukville harbour and s					
Hak Saw	uncing	Questionnaire of Understanding Level in Technolo	Date :		,2015	~	Aug 27,2015
y was sugli	Technology T	ronofor Tonio	Understan	ding Level (F	Please put ch	neck mark)	Comments
the second second second	Technology T	ransfer Topic	Excellent	Good	Fair	Poor	Comments
LAT Convert	LAT knowledge	Learning about LAT knowledge	V				
LAT Convert	HYPACK	Using XYZ Utility to shift Z0 data to LAT data	V			()	
	FME S-57 Writer	Convert additional data to S-57 format file.		~			
	ENC Referencer	Mapping image file (RASTER) from Indian 1960 to UTM 48N.		<			
		Correcting Critical, Error, Warning from ENC Analyzer result.	1				
	ENC Designer	Adding Moving or deleting depth sounding position in order to not to overlap with depth contour.	$\checkmark$		1		
ENC	ENC Optimizer	Applying Melting SOUNDING and setting SCAMIN with to optimize finished ENC cell data		~			
Production	ENC Analyzer	Analyzing and Checking validation of finished ENC cell data with S-57 specification.		V			
	ENO M	Creating ENC exchange set from ENC data cell.		V			
	ENC Manager	Buring ENC exchange set to CD-ROM.		V			
	1	Creating & Editing paper chart layout file.	V			L	
	ENC Cartographer	Checking paper chart with paper	$\checkmark$				
		Setting up plotter and plotting paper chart.	V			5. Contraction (1997)	

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Chhim 1	U	Cambodia ENC 2014 - Sihanoukville harbour and su Questionnaire of Understanding Level in Technolo	Control of the second				
: (Mum)	Morm		Date :	Aug 3	2015	~	Aug 27,2015
	Technology Tr	ransfer Tonic	Understan	iding Level (F	lease put cl	neck mark)	Comments
	recimology in		Excellent	Good	Fair	Poor	Osminenca
LAT Convert	LAT knowledge	Learning about LAT knowledge		V		1	
LAT Convert	HYPACK	Using XYZ Utility to shift Z0 data to LAT data		V			
	FME S-57 Writer	Convert additional data to S-57 format file.			V		
F	ENC Referencer	Mapping image file (RASTER) from Indian 1960 to UTM 48N.		V			
		Correcting Critical, Error, Warning from ENC Analyzer result.			V		
	ENC Designer	Adding Moving or deleting depth sounding position in order to not to overlap with depth contour.		/			
ENC	ENC Optimizer	Applying Melting SOUNDING and setting SCAMIN with to optimize finished ENC cell data		~			
Production	ENC Analyzer	Analyzing and Checking validation of finished ENC cell data with S-57 specification.		~			
	ENG M	Creating ENC exchange set from ENC data cell.		V			
	ENC Manager	Buring ENC exchange set to CD-ROM.		V			
Γ		Creating & Editing paper chart layout file.		V			
	ENC Cartographer	Checking paper chart with paper		V			
		Setting up plotter and plotting paper chart.		V			

Of Aug 2015 Signature Date

Sok Va	annak	Cambodia ENC 2014 - Sihanoukville harbour and su Questionnaire of Understanding Level in Technolo			3,2015	~	Aug 27.2015
	Technology Tr	ansfer Topic	Understan	ding Level (i	Please put cl	heck mark)	Comments
	recimology in		Excellent	Good	Fair	Poor	Contractor
LAT Convert	LAT knowledge	Learning about LAT knowledge		~			
LAT COnvert	HYPACK	Using XYZ Utility to shift Z0 data to LAT data		V	-		
	FME S-57 Writer	Convert additional data to S-57 format file.		V			
Г	ENC Referencer	Mapping image file (RASTER) from Indian 1960 to UTM 48N.		V			
Г		Correcting Critical, Error, Warning from ENC Analyzer result.			V		
	ENC Designer	Adding Moving or deleting depth sounding position in order to not to overlap with depth contour.		V			
ENC	ENC Optimizer	Applying Melting SOUNDING and setting SCAMIN with to optimize finished ENC cell data		~			
Production	ENC Analyzer	Analyzing and Checking validation of finished ENC cell data with S-57 specification.		V			
Г	CHO H	Greating ENC exchange set from ENC data cell.		r			
	ENC Manager	Buring ENC exchange set to CD-ROM.	-	~			
Г		Creating & Editing paper chart layout file.		V			
	ENC Cartographer	Checking paper chart with paper		V			
		Setting up plotter and plotting paper chart.		~	-		

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		Cambodia ENC 2014 – Sihanoukville ha	rbour and su	irroundings			
		Questionnaire of Understanding Level					
ame : LOA	rg burn	MONG.	Date :		9,2016	~	Jun 1,2016
		Technology Transfer Topic	Understan	ding Level (I	Please put c	heck mark)	-
		realitionogy transfer topic	Excellent	Good	Fair	Poor	Comments
		Minimum components of shapefile to open in ArcMAP		V			
		Setting the coordinate system		V			
	Basis of	Creating New Shapefile		V			
	ArcGIS	Basic operation of Geoprocessing tools such as Dissolve		V	V		
Vector data processing		Basic operation of drawing and editing tool		V			
		Importing AutoCAD .dwg file into Map document			V		
	Barris	Creating feature template in order to draw features with attribute			V		
	Drawing Coastlines for ENC	Drawing coastline and 0m contour (low tide) line by interpreting satellite images		V	~		
		Importing Shapefile to AutoCAD and separating layers by attribute value			V		
		Adding Satellite images in Map document			V		
	Satellite Image	Assigning band number to RGB channel in ArcMAP			V		
	Processing	Pansharpening satellite image			V		
Raster data processing	Accuracy	Adding XY ascii data such as .csv file into Map document and converting it to shapefile		V	V		
	Inspection	Checking accuracy of georeferenced raster data such as satellite image using ground control points(GCPs)			~		
	Geometric	Geometric correction of raster image			V		
	Correction	Saving modified raster image to another file or dataformat			V		

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02/06/2016 Date

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Appendix 10 : Technology transfer questionnaires

		Cambodia ENC 2014 - Sihanoukville har					
ame: C	hhim	MORN. Questionnaire of Understanding Level i	n Technolog Date :	gy Transfei Apr 1		~	Jun 1,2016
		Tashnalam, Transfer Tania	Understan	ding Level (F	lease put ch	eck mark)	
	Technology Transfer Topic		Excellent	Good	Fair	Poor	Comments
		Minimum components of shapefile to open in ArcMAP		/			
		Setting the coordinate system		V			
vector data processing	Basis of	Creating New Shapefile		~			
	ArcGIS	Basic operation of Geoprocessing tools such as Dissolve		V			
		Basic operation of drawing and editing tool		V	1		
		Importing AutoCAD .dwg file into Map document		V			
		Creating feature template in order to draw features with attribute	~	~			
	Drawing Coastlines for ENC	Drawing coastline and 0m contour (low tide) line by interpreting satellite images		V	-		
		Importing Shapefile to AutoCAD and separating layers by attribute value		V			
	C. L. IVI	Adding Satellite Images in Map document		V			
	Satellite Image	Assigning band number to RGB channel in ArcMAP		V			
	Processing	Pansharpening satellite image		V			
Raster data processing	Accuracy	Adding XY ascii data such as .csv file into Map document and converting it to shapefile			V		
	Inspection	Checking accuracy of georeferenced raster data such as satellite image using ground control points(GCPs)			V		
	Geometric	Geometric correction of raster image			V		
	Correction	Saving modified raster image to another file or dataformat			/		

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Appendix 10 : Technology transfer questionnaires

·		Cambodia ENC 2014 - Sihanoukville ha	rbour and su	rrounding	6		
(	21. 11	Questionnaire of Understanding Level	in Technolo	gy Transfe	r		
Name : S	ok V	anonalk	Date :	Apr 1	9,2016	~	Jun 1,2016
		Technology Transfer Topic	Understan	ding Level (	Please put cl	neck mark)	0
			Excellent Good		Fair Poor		Comments
		Minimum components of shapefile to open in ArcMAP		~			
		Setting the coordinate system		V			
	Basis of	Creating New Shapefile		V			
	ArcGIS	Basic operation of Geoprocessing tools such as Dissolve			V		
Vector data processing		Basic operation of drawing and editing tool		~			
		Importing AutoCAD .dwg file into Map document		V	-		
		Creating feature template in order to draw features with attribute			V		
	Drawing Coastlines for ENC	Drawing coastline and 0m contour (low tide) line by interpreting satellite images	-		~		
		Importing Shapefile to AutoCAD and separating layers by attribute value		~			
	Controlline.	Adding Satellite images in Map document			V		
	Satellite Image	Assigning band number to RGB channel in ArcMAP		V			
	Processing	Pansharpening satellite image		~			
Raster data processing	Accuracy	Adding XY ascii data such as .csv file into Map document and converting it to shapefile		V			
	Inspection	Checking accuracy of georeferenced raster data such as satellite image using ground control points(GCPs)		~	-		
	Geometric	Geometric correction of raster image		~			
	Correction	Saving modified raster image to another file or dataformat		V			

Signature

Signature \_\_\_\_\_\_\_ Date \_\_\_\_\_\_06/2016\_

		Cambodia ENC 2014 – Sihanoukville har	rbour and su	rrounding	3		
D	0	Questionnaire of Understanding Level i	in Technolo	gy Transfe	r		
lame: Ray	s. Jova	nnarith	Date :	Apr 1	9,2016	~	Jun 1,2016
		Technolom, Transfer Tenio	Understan	ding Level (	Please put c	heck mark)	0
	Technology Transfer Topic			Excellent Good Fair			Comments
		Minimum components of shapefile to open in ArcMAP			V		
		Setting the coordinate system		~	1.000		
	Basis of	Creating New Shapefile		V			
	ArcGIS	Basic operation of Geoprocessing tools such as Dissolve		V			
Vector data processing		Basic operation of drawing and editing tool		V			
processing		Importing AutoCAD .dwg file into Map document			~		
	1	Creating feature template in order to draw features with attribute		V			
	Drawing Coastlines for ENC	Drawing coastline and 0m contour (low tide) line by interpreting satellite images	1	V	1	1	
		Importing Shapefile to AutoCAD and separating layers by attribute value	1		V		
		Adding Satellite images in Map document		~			
	Satellite Image	Assigning band number to RGB channel in ArcMAP			V		
	Processing	Pansharpening satellite image			~		
Raster data processing	Accuracy	Adding XY ascii data such as .csv file into Map document and converting it to shapefile		1.52	V		
	Inspection	Checking accuracy of georeferenced raster data such as satellite image using ground control points(GCPs)			V		
	Geometric	Geometric correction of raster image				V	
	Correction	Saving modified raster image to another file or dataformat				V	

Signature

02.06.2016 Date

Appendix 10 : Technology transfer questionnaires

		Cambodia ENC 2014 – Sihanoukville ha	rbour and su	rroundings	4)		
		Questionnaire of Understanding Level	in Technolog	gy Transfer			
lame : CHH.	IM BASM	EU	Date : 👍	Apr 19	9,2016	~	Jun 1,2016
		Technology Transfer Topic	Understan	ding Level (F	Please put cl	neck mark)	<u> </u>
1		rechnology transfer topic	Excellent	Good Fair		Poor	Comments
		Minimum components of shapefile to open in ArcMAP		V			
		Setting the coordinate system		~			
	Basis of	Creating New Shapefile		V			
	ArcGIS	Basic operation of Geoprocessing tools such as Dissolve		V			
Vector data processing		Basic operation of drawing and editing tool		~			
	1	Importing AutoCAD .dwg file into Map document		1			
	Denter	Creating feature template in order to draw features with attribute		~	8		
	Drawing Coastlines for ENC	Drawing coastline and 0m contour (low tide) line by interpreting satellite images		~			
		Importing Shapefile to AutoCAD and separating layers by attribute value					
	Satellite	Adding Satellite images in Map document		/			
	Image	Assigning band number to RGB channel in ArcMAP		1			
	Processing	Pansharpening satellite image			$\checkmark$		
Raster data processing	Accuracy	Adding XY ascii data such as .csv file into Map document and converting it to shapefile					
		Checking accuracy of georeferenced raster data such as satellite image using ground control points(GCPs)					
	Geometric	Geometric correction of raster image					
	Correction	Saving modified raster image to another file or dataformat					

Cham Signature 02.06.2010 Date

		Cambodia ENC 2014 - Sihanoukville ha	rbour and su	rroundings	-		
ame: A	AL UUTH	-EA- Questionnaire of Understanding Level	in Technolo Date :		9,2016	~	Jun 1,2016
			Understan	ding Level (F	Please put cl	neck mark)	1.0
		Technology Transfer Topic	Excellent	Good	Fair	Poor	Comments
		Minimum components of shapefile to open in ArcMAP		V			
	10 3	Setting the coordinate system	1000	V			
/ector data processing	Basis of ArcGIS	Creating New Shapefile		1			
		Basic operation of Geoprocessing tools such as Dissolve		V			
		Basic operation of drawing and editing tool		V			
	· · · · ·	Importing AutoCAD .dwg file into Map document		~			
		Creating feature template in order to draw features with attribute	V				
	Drawing Coastlines for	Drawing coastline and 0m contour (low tide) line by interpreting satellite images		V			
	ENC	Importing Shapefile to AutoCAD and separating layers by attribute value		V			
		Adding Satellite images in Map document		V			
	Satellite Image	Assigning band number to RGB channel in ArcMAP		V			
	Processing	Pansharpening satellite image		V			
Raster data processing	Accuracy	Adding XY ascii data such as .csv file into Map document and converting it to shapefile		V			
	Inspection	Checking accuracy of georeferenced raster data such as satellite image using ground control points(GCPs)		V			
	Geometric	Geometric correction of raster image		V			
	Correction	Saving modified raster image to another file or dataformat		V			

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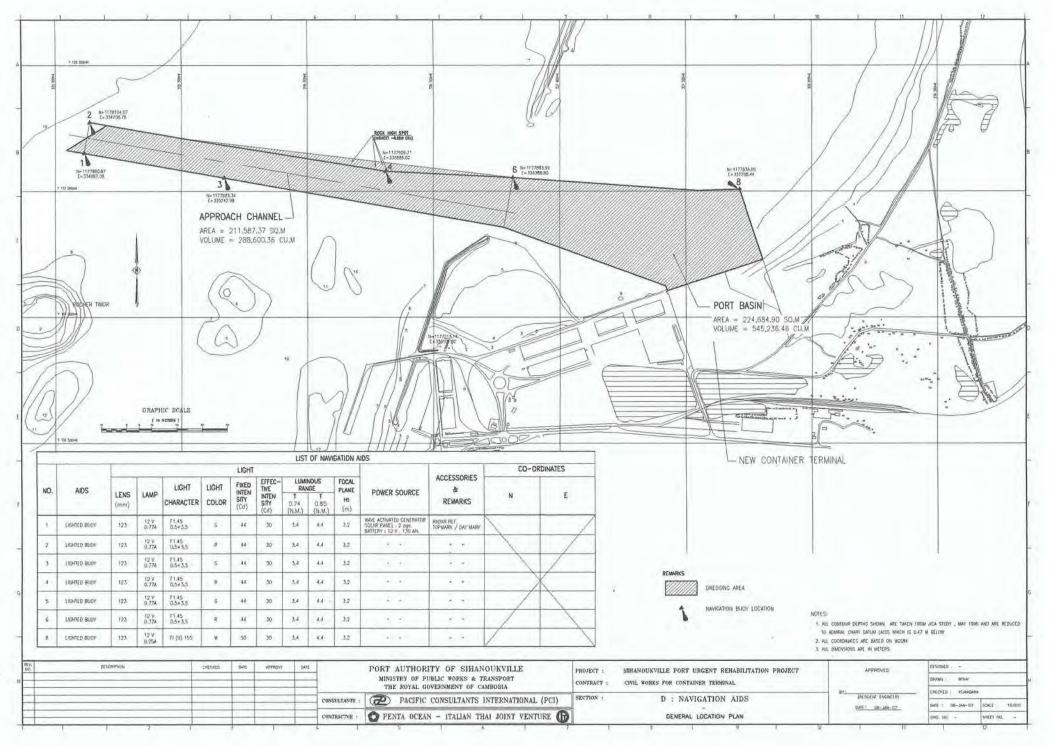
		Cambodia ENC 2014 - Sihanoukville ha	bour and su	rroundings			
11	-	Questionnaire of Understanding Level	in Technolo	gy Transfer	-		
ame: Ma	K. Sam	ineng	Date :	Apr 1	9.2016	~	Jun 1,2016
			Understan	ding Level (F	Please put cl	neck mark)	a standard
		Technology Transfer Topic	Excellent	Good	Fair	Poor	Comments
		Minimum components of shapefile to open in ArcMAP	· · · · · · · · · · · · · · · · · · ·	~			
		Setting the coordinate system		$\checkmark$			
	Basis of	Creating New Shapefile		$\checkmark$			
	ArcGIS	Basic operation of Geoprocessing tools such as Dissolve		V			
Vector data processing		Basic operation of drawing and editing tool		V			
		Importing AutoCAD .dwg file into Map document	$\checkmark$				
	102.000	Creating feature template In order to draw features with attribute		1			
	Drawing Coastlines for ENC	Drawing coastline and 0m contour (low tide) line by interpreting satellite images	$\checkmark$	_ V _			
		Importing Shapefile to AutoCAD and separating layers by attribute value		~			
		Adding Satellite images in Map document	$\vee$				
	Satellite Image	Assigning band number to RGB channel in ArcMAP	V				
	Processing	Pansharpening satellite image	1				
Raster data processing	Accuracy	Adding XY ascii data such as .csv file into Map document and converting it to shapefile	×	V			
	Inspection	Checking accuracy of georeferenced raster data such as satellite image using ground control points(GCPs)		~			
	Geometric	Geometric correction of raster image		$\checkmark$			
	Correction	Saving modified raster image to another file or dataformat		V			

Signature

Date

12. Nov. .02.06.2016

Appendix 10 : Technology transfer questionnaires



Appendix 11 : BM data of PAS

## **DESCRIPTION & RESULT OF GCP-GNSS**

				Latitude	Longitude	Ellipsoidal H. (m)					
Station Name	PAS-BM	Geograp Coordinates	hical WGS84	10° 38' 44.91523″ N 103° 30' 05.85353″ E -12.3602							
				Northing (m) Easting (m) National datum							
Project UTM48		Horizor Coordina		1,177,212.883	336,102.030	level (m) 2.14					
			P1	1,177,212.000							
Data	October, .2013	Eccentric point									
			P2								
N	Site Sketch			PLEIADE	S Image (Scale: approx . 1	/10,000)					
1.00	2.7										
	Site Photo			PLEIADES Image(Scale: approx. 1/1,000)							
		20)									
Remarks: This result will MPWT/WD in (	be created in collabora October, 2013.	tion with JICA	and	Satellite Scene No.:DS_	Image: 5,December,2012 PHR1A_20121205034552( .PX_E103N10_0717_05281 : PLEIADES 16Bit 0.5m PAN-SHARPEN(4BAND)						