16th MEETING OF THE IHO CAPACITY BUILDING SUB-COMMITTEE
IHO-CBSC16
Goa, India, 30 May - 1 June 2018

Paper for Consideration by CBSC16

Support CB Plan - Availability of Training and Consultancy services

Submitted by:	Chartwise Training Limited – Keith Swan.
Executive Summary:	Availability of Training and Consultancy for Nautical Cartography, aimed at supporting Phase 3 of the IHO CB Strategy.
Related Documents:	See Appendix A
	1. SAIHC CB Plan – Programme document for the period 2018-2020
	2. IHO Capacity Building Strategy
	3. IHO – Adopted 2018 CBWP
	4. IHO – Updated 2017 CBWP
Related Projects:	CBSC14-06G
	CBSC15-07C

1. Introduction / Background

Chartwise Training Ltd is a company aimed at providing CB training and consultancy for developing HOs and looking for opportunities to contribute to the IHO CB Strategy.

The Director, Keith Swan, has 39 years experience in paper chart and ENC production and maintenance with the United Kingdom Hydrographic Office (UKHO) and the South African Navy Hydrographic Office (SANHO). He is also a qualified Trainer with training experience to FIG/IHO/ICA recognized Cartography programme at Category "B" level and trained 100s of cartographers form across the world.

2. Analysis/Discussion

The CBWP is demanding and some of the work items are not completed as planned. Chartwise Training Ltd has capacity to provide additional capacity building services to the Hydrographic community to fill gaps where appropriate in a cost effective and timely manner with specialisation in the nautical cartographic field.

Overview of training and consultancy activity

Training:
- Foundation courses
- Advanced courses – to same level as Category "B" recognition
- On the job training
- Training For Trainers

Consultancy:
- QC/QA Quality Management Systems – in line with ISO9001 standard
- Capture/encoding policy guidance
- Technical guidance for production and geospatial issues

Further information is available on the website www.chartwisetraining.com.

Scope of potential contributions

Chartwise Training has access to trainer and consultants who possess a variety of skills, experiences and specialisms in nautical cartography. The main specialism is Training For Trainers which was originally developed by the Director and is designed to enhance individual HO in house training skills.

Appendix A contains a list of outstanding CBSC activities/events/projects for which Chartwsie Training would be able to deliver either independently or in collaboration with a partner such as a larger HO or an industry business.

Training courses are flexible and we can deliver standard established training as well as bespoke courses to suit any particular organisations requirements. Further, there are two important aspects of the training cycle that Chartwise Training can offer.

1.   Training Needs Analysis (TNA) or a Consultancy Package Analysis (CPA)

We have developed comprehensive and easy to follow questionnaires (see example of a section of a TNA questionnaire in Appendix B). These questionnaires would be sent out and returns analysed at no cost to the HO. However, it is appreciated that for some developing nations this type of information gathering may not be appropriate, where this is the case alternative TNA methods would need to be considered.

Similar types of questionnaires have been developed for a remote 'first stage' consultancy and analysis of the HOs requirements.

2.   Post course cost benefits analysis

Another important aspect of the training cycle is a post course cost benefit analysis to establish the cost verses benefits. On request from any of the stakeholders we can conduct a comprehensive post course analysis to advise stakeholders of the actual benefits gained. This would be particularly relevant if blended learning is utilised.

Blended learning

E-learning and blended learning is becoming more widely used in many industries with successful outcomes. Chartwise Training is proposing to make greater use of e-learning as part of future blended learning courses and are keen to collaborate where possible with other organisations such as IMarEST who have been investigating e-learning potential or the CBSC. (ref: CBSC14-06G and CBSC15-07C)

3. Conclusions

Chartwise Training has access to skilled trainer and consultant resource to deliver solutions to a variety of events within the CB Plan.

Chartwise Training offers upfront Training Needs Analysis and Consultancy Package Analysis free of charge and will on request conduct a cost benefits analysis.

There is an initiative to collaborate e- and blended learning with IMarEST.

4. Recommendations

The CBSC to recognise Chartwise Training has extra capacity building training resources to assist with the CB Plan.

The CBSC to encourage MSs, Chairs of HCs and CB Co-ordinators to engage with the Chartwise Training where there may be a nautical cartographic training shortfall.

5. Justification and Impacts

Chartwise Training has carto training and consultancy resource for the HO community in support of the CB strategy, currently this resource is available at short notice.

Developing cartographers would receive their planned training requirement in a timely manner thus HOs can better prepare for SOLAS V9 and V4, to handle changes in data management and develop MSDI capability.

Upfront Training Needs Analysis and Consultancy Package Analysis could be conducted at no cost to IHO, HOs or industry agency. A Training Needs Analysis conducted by Chartwise Training would ensure the right level and the right material is delivered to the right people. Similarly, where a Consultancy Package Analysis is conducted would ensure the consultant delivers cost effective advice and guidance.

Funding the actual training delivery or consultancy would need to be resourced, it has been noted that some HCs also request funding for trainer's attendance. We are a small independent organisation with few overheads.

If requested a cost benefits analysis may be conducted post course or consultancy at no cost to IHO, HOs or industry agency.

6. Action Required of CBSC

The CBSC is invited to:
   a.   Take advantage of Chartwise Training Ltd capacity for providing training and consultancy for the IHO, HCs and HOs.

b. agree to inform RHCs, via IRCC of the services Chartwise Training Ltd can offer.

c. note:

    i. that cartographically skilled and experienced trainers are available at short notice to assist with the CB Plan

    ii. the availability of a Training Needs Analysis and a Consultancy Package Analysis which bears no cost to the receiving HO or agency.

    iii. potential collaboration on e- and blended learning with IMarEST.

Appendix A

List of specific courses where Chartwsie Training are able to contribute to existing Activities/Projects etc.

Related Documents – 1. SAIHC CB Plan - Programme document for the period 2018-2020.
Section 2 'Activities'
Chartwise Training Ltd can deliver courses where 'Cartographic Practitioners' are listed under the column heading 'Target Audience'. The table below is a summary of the Activities where Chartwise Training are able to contribute.

Phase	Activity	Chartwise comments
3.1	Basic ENC and ENC Production course (10 days)	
3.2	ENC Production and QA (5 days)	
4.3	Foundation Module of the Marine Cartography & Data Assessment (MCDA) CAT B Course (3 weeks)	Although not Cat B accredited – Chartwise Training can deliver these courses in line with Cat B competences for Nautical Cartographers or assist an accredited organisation. *(NOTE: The Director and other trainers have delivered Cat B courses for an accredited organisation)*
4.4	Compilation Module of the Marine Cartography & Data Assessment (MCDA) CAT B Course (5 weeks)	
4.5	Product Construction Module of the Marine Cartography & Data Assessment (MCDA) CAT B Course (2 weeks)	
4.6	Data Assessment Module of the Marine Cartography & Data Assessment (MCDA) CAT B Course (3 weeks)	
4.7	Maintenance Module of the Marine Cartography & Data Assessment (MCDA) CAT B Course (2 weeks)	
OJ	On-the-job training	

Related Documents – 2. CB Strategy - IHO Capacity Building Strategy Adopted 10 October 2014 by the EIHC5
Paragraph 5.6 Training methodologies and cooperation
Chartwise Training Ltd has a particular interest in the following:

Bullet point remark in Para 5.6	Chartwsie comments
Training for the trainer (TFT), to improve the availability of trainers within a region or country.	The Director has designed and developed the 2-week course and delivered 3 courses between 2013 and 2016 (also see item P-22 in Related Documents – 3 below)
Investigation of the practical benefit and a possible implementation of blended and e-learning.	The Director has developed remote and blended learning for the UKHO and intends to develop modern e-learning/blended learning solutions

Related Documents – 3. IHO – Adopted 2018 CBWP (updated 31/7/17)

Chartwise Training Ltd could be available to deliver or assist in the delivery of the events/courses listed below

No.	Event / Related Project	Chartwsie comments
P-03	IHO-Nippon Foundation CHART Project	The Director and potential trainers have experience in delivering this course. We are able to assist the UKHO/NIPPON if required.
P-18	Carto Production DB System Development Workshop (Project Submission Ref: EAHC-03P)	The Director and potential trainers have experience in use of existing DB a prod system and trained staff to use them. We are able to assist the EAHC if required.
P-22	Review of Basic Carto Workshop (Project Submission Ref: EAHC-04P)	The Director designed and developed the TFT and was the lead trainer for the courses in 2013 and 2014, therefore has a unique in-depth background knowledge of the TFT and its intended outcomes.
P-25 & P-26	Development of a Regional MSDI Workshop (Project Submission Ref: SAIHC-02P & RSAHC-01P)	Believed to be a particular specialism for the IIC Academy. We would be willing to assist IIC if required.
P-28	MSDI and Data Management Workshop (Project Submission Ref: SWAtHC-03P)	Chartwise Training may be able to assist with this course

Related Documents – 4. IHO – Updated 2017 CBWP

Chartwise Training Ltd are able and available to deliver at relatively short notice the following pending event/course that were not delivered in 2017.

No.	Event	Chartwsie comments
P-26	Basic ENC & ENC Production (Project Submission Ref: RSAHC-2-P1)	With the rollout for mandatory use of ECIDS nearing completion, Chartwise Training would be available to deliver at short notice.

Appendix B

Example of a Chartwise Training questionnaire for Training Needs Analysis purposes

TRAINING NEEDS ANALYSIS

CTL-TNA001 v1.0

Questionnaire – Organisation Overview

Section 2 - Paper Chart production

2.1 Does your organisation currently produce paper charts? Yes ☐ No ☐

If Yes - continue   If No - go to question 2.7

2.2 Does your organisation have third-party assistance in the production of your paper charts? Yes ☐ No ☐

If Yes - Please describe below what assistance you receive.

2.3 What production system does your organisation use to produce paper charts?

2.4 Please also state current version and build number of the production system?

2.5 How many years has your organisation been producing paper charts using this production system?

2.6 Are there plans to replace your paper chart production system with the next 2 years? Yes ☐ No ☐

If Yes - What is the planned replacement system?

Now go to Question 2.10

2.7 Is your organisation planning to produce paper charts in the future? Yes ☐ No ☐

If Yes - continue   If No - go to Section 3

2.8 When does your organisation plan to start paper chart production?

2.9 What production system will your organisation be using to produce paper charts?

2.10 Is there anything else about current paper chart production that would be relevant to this TNA? If Yes – Please explain below