

UNITED KINGDOM HYDROGRAPHIC OFFICE

Japan Capacity Building Project  
NIPPON Foundation

## Category B Programme

Marine Cartography,  
Hydrographic Data Processing including  
specialism Electronic Navigational Charts

*September 2nd 2013 – December 13<sup>th</sup> 2013*

## COURSE REPORT

Lynton Greatwood  
January 15<sup>th</sup> 2014



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## **Executive Summary**

This course is the fifth of a five year commitment for the UKHO to deliver its internationally accredited programme, Hydrographic Data Processing and Marine Cartography in support of the Japan Capacity Building Project. This report summarises the outcomes of the delivery of the 2013 course, and makes recommendations to enhance future delivery.

The candidates for this course were selected on the 18<sup>th</sup> April 2013 at IHB premises in Monaco. The selection was made by representatives from the IHB, JHOD, JHA and UKHO. The course received a high number of applications (32 applicants from 27 countries), of which 6 delegates were selected. The selection criteria and process resulted in the selection of 6 delegates from Algeria, Bulgaria, Indonesia, Solomon Islands, Sri Lanka and Thailand with Bangladesh and Trinidad and Tobago as reserves. The Indonesian delegate was unable to attend so the reserve delegate from Trinidad and Tobago was brought forward.

The 15 week course is an intense programme, requiring significant commitment from all parties. It was also important, and a key element of the selection criteria, that all participants would be able to utilise the skills gained following the course.

The delegates all settled quickly into the course and soon bonded and developed as a group, this remained a real positive throughout the course and the level of support they provided for each other was invaluable. This was confirmed on several occasions when the more experienced of the group provided evening assistance and support to delegates who had a weaker understanding of English. Such support was also evident in group discussions and presentations. The addition of an officer from JHOD was welcomed adding wider experience to the group.

All of the delegates successfully completed the course, feedback received was positive, the support provided and the level of commitment shown by the training and support staff was excellent. Several comments suggested more time should be allocated to ENC as this would allow for more practice.

The establishment of the NIPPON fellowship is also an important development which enhances knowledge sharing and networking in support of the NIPPON aim of developing an international human resource network

This course has proved to be another success. All participants should be congratulated on their achievement. Lessons continue to be learnt and the feedback provided will be applied where necessary to enhance future delegates' experiences. However considering the commitment and organization required, this course was another pleasure to be involved in, and all parties are thanked for their contribution and support.

***NIPPON FOUNDATION – UK HYDROGRAPHIC OFFICE  
UKHO Category B programme***

This was once again a truly international collaboration and supports the ethos of the IHB and NIPPON Foundation in developing capacity, improving standards, and in developing an international cartographic community to enable continuous professional development.

It should also be noted that we have received several provisions of evidence from previous students of how they are sharing the knowledge gained and applying within their own organizations. Also letters of commendation from hydrographers have been received from their respective organizations which highlight the value of the training and demonstrate real return on investment.

**Successful delegates were:**

Mr Mohamed Zabour. (Algeria)

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**UKHO Category B programme**

Nikolay Radoslavov Lyaskovski (Bulgaria)  
Mr. Dwight Nanan (Trinidad & Tobago)  
Mr John Dalomae (Solomon Islands)  
Mr Rahubadda Kankanamge Anura  
Ariyaratna (Sri-Lanka)  
Sub Lt Uaychai Phothong (Thailand)  
Mr Yusuke Nagase (Japan)



**Class of 2013**

**1. Background**

The announcement of this course was made via IHB Circular Letter 30 / 2013 of 30<sup>th</sup> April 2013 (**Annex A**), inviting organizations to nominate individuals who would benefit from marine cartographic training and who would be able to apply the skills learnt within their respective organizations following the intense programme.

A high number of applications were again received (30 applicants, 27 countries). The selection process resulted in 6 individuals being selected to attend the NIPPON Foundation funded UKHO programme.

The MOU drafted in 2009 defined the roles and responsibilities of the principle bodies involved in the process (IHB/NIPPON/JHOD/JHA/UKHO) supporting the course administration, planning and delivery.

The course would be managed, administered and delivered by the UKHO. This report is intended to review and evaluate the whole programme, and provide conclusions and recommendations to inform the next review committee meeting to be held in Tokyo at the offices of Japan Hydrographic and Oceanographic Department on 15<sup>th</sup> January 2014.

## **2. The course**

The course delivered was the UKHO Hydrographic Data Processing and Marine Cartography course, including the specialism of ENC. This course is internationally accredited by the IHB/FIG/ICA Board at the Category B level of the S8 Standard for Nautical Cartographers. The course is offered in 3 Modules (Module 1 Marine Cartography; Module 2 Hydrographic Data Processing; Module 3 Electronic Navigational Charts). The course commenced on September 2nd 2013 and concluded on December 13<sup>th</sup> 2013.

The course was formally opened by the Deputy National Hydrographer, Jamie McMichael-Phillips supported by the training team, Mr Jeff Bryant the International Capacity Building Manager and other members of the UKHO, representative of the delegate's respective areas.

## **3. Administration**

The course administration was carried by the UKHO training team administrator. All selected delegates were sent detailed Joining Instructions, informing them of accommodation, flights, Visa and security arrangements.

A map of the arrival terminal was also provided as requested previously to help.

## **4. Course Outcomes/Results.**

### **4.1 Course Aims and Objectives**

The course objectives are:

Provide a sound introduction to the techniques and responsibilities of processing hydrographic data into published and digital form.

Concentrating on Nautical Charts, it lays the foundation for data processing and chart compilation skills. This is achieved by:

- Introducing the attendees to the skills and techniques required to compile accurate nautical charts, containing information and detail essential to the mariner for safe navigation.
- Showing the importance of identifying safety critical features.
- Introducing the attendees to basic navigation, bringing an essential awareness of how charts are used and an appreciation of the wider implications of promulgating hydrographic data. To include elementary navigational mathematics and methods of visual/electronic position fixing.
- Providing the attendees with the underpinning knowledge of the specialist support/processes needed in the production and maintenance of navigational charts.
- Introducing the attendees to digital compilation procedures.
- Introducing the attendees to international standards for Electronic Navigational Charts.
- Providing the attendees with the underpinning skills and knowledge to produce and maintain Electronic Navigational Charts.

#### **Course Assessment standard**

- *To achieve the minimum training standard in each Module of the course, the delegates should achieve an overall pass mark of at least 50% on each Module.*

All students were assessed during the course. Formal assessments were undertaken for each area of the work, with students informed of the criteria before each assignment.

On successful completion of each module each delegate received a certificate of module completion.

A certificate stating successful completion of the Category B course was presented to all who complete the programme satisfactorily. Any delegates that do not pass the complete programme will have a certificate of attendance.

Students received ongoing feedback during the course to enhance development and to prepare for formal assessments.

Each student also received an end of course report and feedback on their performance at the end of course by the UKHO Training Manager.

## **4.2 The course**

The course delivered was the UKHO's internationally accredited programme, Hydrographic Data Processing and Marine Cartography including specialism ENC.

The course is delivered as 3 Modules each of 5 weeks in duration.



The course is highly practical and enables delegates to demonstrate knowledge and aptitude through a series of progressive exercises and assignments, and through examinations. The course supports the Category B standard through demonstration of learning through skills, knowledge and attitudes. The course aims to support a range of learning styles, is interactive and encourages participation.

Formal and informal assessments were carried out throughout the course, with feedback provided to individuals and the group.

The course was delivered by the UKHO Training Team, and supplemented by presentations from Specialist speakers, and with visits to related work areas. This helped put their learning into context adding value to the framework. Additionally field trips were undertaken to the following authorities to enable the delegates to gain an understanding of chart usage, data gathering, national and port responsibilities.

#### **Field trips undertaken:**

Bristol Port Authority  
Brixham Harbour.

#### **International visits received:**

Mr Mustafa Iptes (Director IHB) and Mr. Satoshi Yamao (JHOD seconded to IHB) joined Mr Kanazawa (Technical Advisor JHA) to meet the Training team and the delegates at the UKHO on 18<sup>th</sup> October 2013.

The visit of Mr Mustafa Iptes, Mr. Yamao and Mr Kanazawa was an honour which was very well received by all participants. It gave the delegates encouragement, and was very much appreciated by the training team. The presentation by Mr Mustafa Iptes on the role and responsibilities of the IHO was also very welcome reinforcing to the delegates the importance of their individual role and how this evolves into the wider responsibilities. This visit is also inspirational for the Training team, reinforcing the importance of all parties within the hydrographic and cartographic communities.

#### **4.3 Student results**

All six delegates successfully completed the course, and all 3 Modules. It was a considerable step upwards to take but their commitment was commendable as was their enthusiasm to continue to learn on return to their offices.

#### **(Annex B – Summary of Results).**

The group as a whole worked exceptionally well together, supported each other and the training team, were always willing to ask questions and interact with the trainers, and were a pleasure to train and to have with us. The selection process has again proved to be vindicated with all delegates repaying the faith shown in them by the selection committee



and by their own organization in nominating them. In all five courses the level of commitment, aptitude and willingness to learn has been reassuring and the evidence now appearing from ex-students of their progression since the course is very gratifying.

An overall assessment of each student was carried out, and fed back to them at the end of the course. This assessment will be sent to each of them and to their respective managers. Included in the assessment was a forward Action Plan with recommendations as to how the learning should be applied.

The written examinations were improved and with a little guidance on the subjects covered all students did well despite the previous experiences encountered in other years.

Module 3 was again testing but the results were still good and guidance was given if any confusion arose.

At the end of each Module the students were presented with Module certificates (Module 1, presented by Mr Mustafa Iptes and Mr Kanazawa), (Module 2 & 3, by Captain Jamie McMichael Phillips (Deputy National Hydrographer).

The Final Certificates, were presented by Captain Jamie McMichael-Phillips (UKHO Deputy National Hydrographer) at the closing ceremony. **(Annex E – Course Certificate.)**

## **5. Course Evaluations**

The course was fully evaluated both during and at the end of course.

The students were all given the opportunity to feedback to the trainers every two weeks on how they had progressed and identified any issues which could be resolved and reviewed. This feedback enables the students to have direct input into their own learning, and can help resolve any concerns or issues. It was also accepted that if there was anything of concern it could be brought to our attention at any time.

An end of course evaluation was also carried out. This took the form of allowing the students to comment freely on the programme, and to review the whole programme, including administration, management, training delivery and social events. **(Annex C – Summary of Course Evaluations)**

A 3 month evaluation will be implemented to review how learning has transferred to their respective organizations. A report on those findings will be submitted.

A summary of the feedback received is as follows:

### **5.1 Joining Instructions.**

The Joining Instructions were well received, and all regarded them as being very useful. The feedback from the previous year was noted and incorporated.

- *Joining Instructions given are complete and detailed. All the administration instructions given on the joining instructions. May be you can add detail instruction for flight detail, such as a maximum weight for baggage and how much you need to pay for extra.*
- *The Joining Instructions helped so much before the course. In my opinion it provided necessary information while it is not too long.*
- *Very helpful.*  
*The Joining Instructions were very helpful. All instructions mentioned about all necessary information like course feature, travel guide, accommodation and even included the detail of complementary services in accommodation. It was really helpful for a student like me first time been to UK. These all joining instructions helped me a lot.*

## **5.2 Flights**

All flights were booked well in advance by the UKHO with students informed of the procedure to process their E-Ticket. Detailed joining instructions and the airport layout map informed the delegates of the arrangements once arriving in the UK.

Despite the detailed instructions there were issues with Visas as there was some confusion as to the precise type of visa required by one delegate although this was sorted out in time and one of the delegates applied late and missed the first day of the course.

Other issues were waiting times and unsociable hours but all flights are sent to delegates to approve before booking and such irritations have to be balanced against the cost of alternative flights.

## **5.3 Arriving in the UK.**

This was again generally positive.

### **Were the Joining Instructions helpful?**

- Yes the Joining instructions were very helpful...very detailed and correct.
- Definitely, the Joining instructions were very helpful and I didn't find any difficulty to reach my destinations.
- It's very helpful and made it easy.
- It was very helpful, without it will be impossible.
- It was very helpful for me to get ready for this programme. Thanks Mel for your great work.
- Most of the instructions were clear and understandable and detailed.
- Yes, the instructions were helpful and did assist me in finding my way in catching the bus to the hotel from the terminal.
- Yes, I got enough information.

**were the flight arrangements for your journey satisfactory? How could those arrangements be improved if at all?**

- The flight arrangements were very satisfactorily.

- The flight arrangements were satisfactory.
- My flight arrangements were very good for time and date.
- The flight arrangements were good.
- For me it is ok, Qatar Airways gave very good service. For future training programmes I suggest Sri Lanka airways are very good because it is a direct flight.
- Arrival flight arrangements were OK. Not sure of the departure if possible to be earlier.
- Overall, the arrangements were excellent thanks to Melanie's efficient follow-up and correspondences.
- Yes, usually we need 2 or 3 luggages for over 3 month stay. So we have to pay additional charge.

**On arrival in the UK, were the instructions you received clear? Is there anything further in the instructions that may have helped you on your arrival? Were the arrangements made for you satisfactory? How could they be improved?**

- My instructions were very clear, very well thought out and presented.
- Absolutely clear and helpful.
- I have good instructions; it's very clear and more detail.
- The instructions were very good. The arrangements were very good and I don't think that there is something to improve.
- Instructions were very good and it was very helpful to me.
- The instructions were clear and detailed and very little of the details were missing, further restrictions will help me at all. The arrangements been made for me were satisfactory.
- As stated in 1) above the instruction were clear as those instructions sent by email were pursued accordingly.
- Yes. I don't have problem more.

#### **5.4 Accommodation**

The feedback on the Blorange Guest House was again excellent, with most commending the hotel management and staff for their support and help. It is a bonus that the hotel allows the students to have use of the kitchen facilities which helps in allowing the students not only to cook their own specialities but bond in sharing and cooking for others. The staff responded to their requests and queries promptly and made sure they were comfortable throughout their stay.

More expensive hotels would not offer this flexibility that is beneficial for a long stay.

**Was the accommodation arranged for your stay suitable?**

- Yes the accommodation was suitable.
- Yes it was, we had internet problem but it was fixed by the time.
- The accommodation arranged was very suitable.
- The hotel was good. The stay there was very good.
- Yes, it is good place.

- Yes, maybe more variety of food for breakfast.
- The accommodation was excellent.
- I think very good. Staff, facility and service are also good.

### **5.5 Course Delivery**

The feedback is pleasingly very positive and reassuring again.

#### **Did the training meet your expectations? Did you get sufficient support from the training team?**

- The training did meet my expectations. Also I received full support on any query from the training team.
- Yes they did, and I received full support from the training team.
- The training met my expectations and I can learn a lot of things from the training team.
- The support from the training team was more than excellent.
- Training was very much helpful for me to get knowledge on cartography field.
- Training team done very good job. Thanks for all UKHO trainers.
- The training met most of my expectations I was expecting more exercises of hydrographic survey data assessment in a different meaning and some more theory part. The support from the training team was great, especially from the older men.
- The training met my expectation. I got a lot of support from the trainers especially in the ENC module which is new to me. The trainers were very helpful in assisting me with the practical exercises.
- Yes, I have a problem only English knowledge. I want more talking about cartographic but training team helped me every time.

### **5.6 Course Management**

The feedback was positive and reassuring.

#### **Was the course managed to your expectations?**

- It was very well managed into order to meet all the requirements.
- It was very well managed.
- This course managed very well. I have new things to learn every day.
- Definitely. The delivery was very good and we have all the support we need to go through the learning.
- Very much.
- It met my expectations as now after attending the ENC, I now realise what software's, procedures etc needs to be purchased or in place. The requirements that are expected from the organisation. It obviously will assist me in decision making in cartographic activities.

## **5.7 Social Events**

This plays a important addition to course ensuring the delegates have opportunities to experience the local attractions and enjoy their time outside of the classroom.

The training team planned a series of weekend visits for the delegates and also arranged evening social events during the course.

This was well received

### **Did you have enough support from the training team in enabling you to experience/enjoy outside work events?**

- Yes enough support was given and helpful.
- Yes I enjoy their support.
- The training team they are a very good team, they have a good knowledge and experience and they know how to teach for an international student.
- I think that the outside work was the best part of the course. It helps a lot and provides good experience.
- Yes they gave us maximum support and organised very good outside work and field trips.
- Yes.
- Yes I did. The trainers were excellent in and out of training time. I have been to interesting places during the course visits.
- Yes. Amply.

## **5.8. The UKHO**

During the course the delegates had the opportunity to visit a variety of work areas within the UKHO. They would meet specialists and staff involved in compilation and maintenance of their own respective countries waters. This is an 'added value' element of the course as it enables the learning to be put into context, providing an opportunity for the delegates to discuss and resolve any local issues providing useful contacts.

### **Do you feel that the visits/presentations from other work areas within the UKHO were beneficial?**

- All visits within the UKHO was beneficial, learning of the UKHO procedure gave me a better overall understanding of the running and operations of a HO. It also gave ideas if improving my own HO.
- Yes they were, because we needed that. We did theory and practical in the classroom and after visits we could correct ourselves in many cases.
- It's very beneficial, for me it's like a new world everything's everywhere at The UKHO stand on "standard".
- Yes I do. Without visits the learning process will be insufficient. The staff from other work areas and RTs gave us good knowledge which

helped us to gain more experience and better understanding of the course.

- Yes at all.
- It was beneficial especially to actually see how things are done in the real environment. Maybe 1 or 2 weeks attachment to the regional teams will be worth while.

### **5.9 Any Other Comments**

- The training staff from first contact up to the last day was very opening and helpful, and tried their best to meet my every demand.
- I want to congratulate the staff of training for their support, and thanks to all UKHO staff.
- Thank you very much for your help and kindness.
- Thanks to all the trainers for their efforts.
- I want to thank all UKHO staff, trainers , UK government and the NIPPON Foundation for organising a remarkable training programme. Especially thanks to Mel you done a great job to succeed this training programme.
- More exercises in the digital world will be better and more theoretical staff about survey data assessment.
- Maybe an additional week can be added to the ENC mode. A reduction within the Data Assessment 5 week period. Thank you.
- Thanks training team and all staff.

### **6. Finance/ Review of expenditure**

It was agreed that the NIPPON Foundation would fund the programme to the total of £150,000. Of that amount £72,000 would be allocated to training delivery.

Accommodation would be at £53 per person per night.

A Daily allowance of £20 per day would be allocated.

The UKHO also committed funds to cover additional expenses related to entertainment/social events. This is an important element of the students stay, and ensures that they get a wider experience during their stay enabling a more conducive environment in which to learn. It helps to bond the group and enables students to get to know UKHO staff outside of their normal work environment. These relationships play an important role during and post course.

The daily allowance allocated was appreciated by the students, and is sufficient to enable them to support themselves during meal time and weekends.

The delivery costs were slightly lower than in 2012. This was expected as the experience of the 2012 course enabled some refinement of process and reduction in preparation. It is not expected to recover these additional delivery costs as part of this agreement, as the UKHO recognises the

investment already made, and also appreciates the need to ensure support is there at all times independent of budget.

The generosity of the NIPPON Foundation in supporting this course is very much appreciated, and it is now important that such investment is measured in real terms through transfer of learning into each student's organization. The evidence from past four years demonstrates that there has been a real return on the investment made and I'm sure that this will continue with this group.

**The following is an overview of expenditure incurred:**

Course Delivery	£90,904
JHOD Student cost	£7,384.43
Course Hospitality (Entertainment, Allowances Etc)	£14,309.60
Student Costs (Flights, Travel, Accommodation etc)	£57,120.12
Total	£ 169,718.15

The total amount to be paid by NIPPON Foundation is £72,000 for delivery +£ 57,120.12 (Students Costs) **Total =£129,120.35**

## **7. Conclusions**

This course was once again an honour for the UKHO to deliver, thanks to the generosity of the NIPPON Foundation, and the support provided by the IHB, JHA and JHOD.

This was a major commitment for the UKHO Training team but one that proves to be a rewarding and enjoyable experience. To deliver such a programme (15 weeks) requires great commitment from the training team and especially from the delegates.

The selection process for this programme, and the criteria set, proved to be generally correct resulting in a high calibre of delegates. The group selected were generally very good, one delegate arrived late due to a visa problem. The attitude of all, from day one was exemplary, their willingness to learn, to apply themselves, to undertake the exercises given without question, and to support the training team so willingly was a credit to the group as a whole. The evaluations submitted also support the generosity of spirit, and their willingness to provide constructive comment.



There are, of course, always lessons to be learnt, and the feedback gained from both students and trainers will be applied to ensure the course progresses and that the delegates stay continues to be a rewarding one in the future. The lessons learnt from all previous courses have been applied to this course.

What is now important is that the investment made by all parties in ensuring this course was a success, and the learning gained will now be applied in the students respective organizations.

The feedback provided by the course in 2013 shows that this course is not only well received and appreciated but also having a real tangible impact on individuals and organizations.

A follow up 3 month evaluation will take place to identify how the learning has transferred for each student. This will provide real evidence of the benefits of the programme. Ultimately it is hoped that students through provision of evidence will be able to be recognised through a Certificate of Proficiency. There are six delegates from previous courses who have already submitted evidence and one with a letter of commendation from his head of organization.

There will undoubtedly be some intangible benefits. As “ambassadors of the IHO” they have a responsibility to share their knowledge and continue to communicate with each other. Creating such an international community and network will encourage continuous professional development, and this kind of communication has already been evident from previous courses. The creation of the NIPPON Fellowship also supports the ethos of the NIPPON Foundation in creating a “human network” supporting knowledge sharing.

I would personally like to thank the NIPPON Foundation for their generosity in supporting this programme, the JHA and JHOD for their trust and support, the UKHO’s support, and to the IHB for maintaining their support and encouragement.

#### **(Annex D – Press Release/)**

### **8. Recommendations**

The following are recommendations made following the evaluations undertaken and from the trainer’s feedback and experience:

#### **For UKHO consideration and action**

- To review the documents sent encouraging the delegates to contact their embassies to ensure visas are obtained in time.
- To make sure that times are conveyed for transport / or taxi if no if arrival or departure time occur at unsociable hours
- To review the content of the ENC module to ensure more practical exercises are given consideration.

**For NIPPON/JHOD/JHA/IHB consideration and action**

- The visits made by representatives of IHB was very well received and appreciated by the training team and the students. These should continue if at all possible.
- A visit by a NIPPON Foundation representative to the course would be beneficial and appreciated.
- Review selection criteria to ensure all delegates will have the opportunity to apply skills and knowledge. In particular if we are to continue in the same format.

INTERNATIONAL HYDROGRAPHIC  
ORGANIZATION



ORGANISATION HYDROGRAPHIQUE  
INTERNATIONALE

IHB File N° TA-006-S1/3022

CIRCULAR LETTER 30/2013  
30 April 2013

**JAPAN CAPACITY BUILDING PROJECT**  
**5th Course in Hydrographic Data Processing and Marine Cartography,**  
**including specialism in Electronic Navigational Chart.**  
**UKHO, Taunton, UK, 02 September – 13 December 2013**  
*(Recognized at Category B by the FIG-IHO-ICA International Board on Standards*  
*of Competence for Hydrographic Surveyors and Nautical Cartographers)*

Reference: CL 10/2013 dated 07 February- *Japan Capacity Building Project - 5th Course in Hydrographic Data Processing and Marine Cartography, including specialism in Electronic Navigational Chart. UKHO, Taunton, UK, 02 September - 13 December 2013.*

Dear Hydrographer,

1. In the above-referenced Circular Letter, the Directing Committee invited the IHO Member States to consider nominating one suitable candidate who would benefit from the opportunity offered by the Japan Capacity Building Project – funded by the Nippon Foundation – to provide training in Hydrographic Data Processing and Marine Cartography, including specialism in Electronic Navigational Chart. The Chairs of Regional Hydrographic Commissions were invited to liaise with their Associate Members and Observer countries so that they could also consider applying for this training opportunity.
2. The IHB received 33 applications from 27 countries for this particular course. The selection board, comprising representatives from the Japan Hydrographic Association (JHA), the Japan Hydrographic and Oceanographic Department (JHOD), the UK Hydrographic Office (UKHO) and the IHB met on 18 April 2013 and examined all the applications received.
3. The candidates from Algeria, Bulgaria, Indonesia, Solomon Islands, Sri Lanka and Thailand were finally selected for the course that will take place at the UK Hydrographic Office, from 2 September to 13 December 2013. Individual notification letters are being sent by the IHB with the instructions to be followed by the selected applicants.
4. It is a fact that there is still a big demand for the training covered by the course and, for that reason, it is likely that it will be run again in 2014, thanks to the continuing and generous support of the Nippon Foundation.
5. The Directing Committee advises those organizations, whose applicants have not been selected this time, to keep abreast of the future opportunities. It is worth mentioning that the Directing Committee is also continuing to seek additional resources to enable similar courses to be delivered through new funding.

Annex I – Summary of the Programme.

**JAPAN CAPACITY BUILDING PROJECT**  
**5th Course in Hydrographic Data Processing and Marine Cartography,**  
**including specialism in Electronic Navigational Chart.**  
**UKHO, Taunton, UK, 02 September – 13 December 2013**

**SUMMARY OF THE COURSE PROGRAMME**

The course is composed of modules. The Modules are: Marine Cartography, Hydrographic Data Processing and Electronic Navigational Charts (ENC). Each module is of 5 weeks duration and the contents are as follows:

**MODULE 1 – MARINE CARTOGRAPHY.**

A practical introduction to marine cartography and chart construction. This module is recognized as part of the FIG–IHO–ICA Category B Certificate in Nautical Cartography.

The navigational chart
The navigational chart – its role and purpose
The navigational chart – History and Development
Type of chart and chart user
Chart projections and grids
Horizontal datums
Vertical datums
Accuracy, precision and reliability
Chart scheming
International and national organizations
Linear scales
Latitude and longitude
Compass roses; magnetic variation
Bearing and distance
Navigational aids
IALA Buoyage System
Lights; radio aids
Chart symbols
Chart text and type styles
Chart topography
Chart Specifications
Verification procedures
Generalisation
Scaling methods
Introduction to surveying
Depths – units; selection; contouring
Navigational Dangers; Nature of seabed
Tidal theory
Quality management system
Chart Compilation; vector capture
Intellectual property
Printing and finishing
Network operating systems

**MODULE 2 HYDROGRAPHIC DATA PROCESSING.**

A practical introduction to hydrographic data processing, data assessment and resulting chart maintenance. This module is recognized as part of the FIG-IHO-ICA Category B Certificate in Nautical Cartography.

Introduction to source data
Accuracy of source data
Source material
Source diagrams
CATZOC
Data assessment
Chart maintenance – the need
Notice to Mariners; Notice to Mariners Blocks
Foreign Government Charts
Routing; Law of the Sea
Hydrographic Databases
New Edition procedures and processes
Raster data; file management
Multibeam; SIPS
Oceanographic data
Archiving and retrieving source information

**MODULE 3 ELECTRONIC NAVIGATIONAL CHARTS (ENC).**

A highly practical introduction to the Electronic Navigational Chart (ENC), international standards for ENC, and the production and maintenance of ENC data. This module is recognized as part of the FIG-IHO-ICA Category B Certificate in Nautical Cartography.

What is an ENC? History and Development of ENCs
Introduction to GIS
Overview of S-57
Objects and attributes; polygons; topology
ENC Product Specification
Mandatory attributes; META objects; TXT and PICREP files
Object Catalogue; Attribute Catalogue; Use of the Object Catalogue; Data Capture Specifications
Usage bands
Distribution of ENCs; RENCs
New Cell capture
SCAMIN; CATZOC
Lights and Light Supports
ENC Quality Procedures
Consistency of ENCs
Positional accuracy
Magnetic Variation
ENC Updates
New Editions
Edge matching
Verification and validation
ECDIS; S-52
S-100; Future developments

## ANNEX B – Summary of Results

Name	Worbarrow Bay	King Road 1859	Marine Carto Test	%		Data ass Test		Plotting/Bear Dist 1190	Proof Check Barnstaple	%	Final % Overall
Anura	50	52	68	57	Anura	78%	Anura	50	55	52.5	46
Dwight	58	78	89	75	Dwight	68%	Dwight	87	70	78.5	64
Uaychai	62	64	98	75	Uaychai	74%	Uaychai	76	76	76	63
Nikolay	68	69	89	75	Nikolay	68%	Nikolay	68	71	69.5	61
Yusck	65	71	79	72	Yusck	68%	Yusck	82	58	70	59
John	58	55	71	61	John	75%	John	63	40	51.5	48
Mohamed	69	72	73	71	Mohamed	66%	Mohamed	71	69	70	59
Average	61	66	81	70	Average		Average	71	63	67	57

### Module 2 Data Assessment

Student Name	End of week 1 test	Cebu Assessment	NM's Humber/Fowey	Block 2nd scale 223	NE 1077
Mohamed Zabour	87%	60%	88%	61%	69%
Nikolay Lyaskovski	83%	50%	64%	42%	73%
Dwight Nanan	93%	64%	86%	38%	67%
John Dalomae	87%	36%	84%	46%	70%
Anura Ariyaratna	93%	52%	64%	52%	64%
Uaychai Phothong(Jack)	90%	50%	78%	59%	76%
Yusuke Nagase	73%	68%	78%	52%	68%

**Module 3 ENC**

Name	Week 1 Quiz	Brixham	Validation	End of Course Quiz	Module Average
Anura	83	86	61	63	<b>74</b>
Dwight	78	92	58	75	<b>75</b>
Uaychai	87	90	67	92	<b>83</b>
Nikolay	78	87	61	84	<b>77</b>
Yusuke	39	78	44	52	<b>58</b>
John	65	82	50	66	<b>67</b>
Mohamed	65	87	50	54	<b>64</b>
<b>Average</b>	70.71	86.00	55.86	69.43	<b>71</b>



## **ANNEX C – Summary of Course Evaluations**

### **JAPAN CAPACITY BUILDING PROJECT – NIPPON FOUNDATION/JHA/ UKHO TRAINING**

#### **HYDROGRAPHIC DATA PROCESSING AND MARINE CARTOGRAPHY Specialism ELECTRONIC NAVIGATIONAL CHARTS DATE: SEPTEMBER 2<sup>nd</sup> 2013 – DECEMBER 13<sup>TH</sup> 2013.**

#### **END OF COURSE DELEGATE FEEDBACK**

The aim of this feedback form is to inform the UKHO Training Team on how the training programme, from initial joining instructions through to final delivery has been received by the delegates. This feedback is invaluable in enabling future programmes to evolve, meet delegate's needs, and supports the final evaluation process and course report, which will be submitted to the NIPPON Foundation, IHB, JHA for the Course Review meeting in January 2014.

The views and feedback from those who attended this programme are invaluable to this review process and will be included in the final course report. Additionally evaluations and feedback gained during the programme will also be included.

Please take some time to consider the whole process, and include comments against each element, and add any comments you feel would enable future programmes to be enhanced.

This feedback form is for you to comment as you wish, however for each element some sample questions have been included that may help you when considering any comments you wish to make. However what is important is that you comment freely, openly and honestly.

It may help to take yourself back to when you received that initial selection letter. What did you feel? What were your expectations? Have they been met? If you were to go through this experience again what would have made your visit even more enjoyable and rewarding?

Thank you in anticipation

Lynton Greatwood  
Technical Training & Development Manager

## **NIPPON 2013 Course Feedback**

### **Q1) Were the Joining Instructions helpful?**

- Yes the Joining instructions were very helpful...very detailed and correct.
- Definitely, the Joining instructions were very helpful and I didn't find any difficulty to reach my destinations.
- It's very helpful and made it easy.
- It was very helpful, without it will be impossible.
- It was very helpful for me to get ready for this programme. Thanks Mel for your great work.
- Most of the instructions were clear and understandable and detailed.
- Yes, the instructions were helpful and did assist me in finding my way in catching the bus to the hotel from the terminal.
- Yes, I got enough information.

### **Q2) were the flight arrangements for your journey satisfactory? How could those arrangements be improved if at all?**

- The flight arrangements were very satisfactorily.
- The flight arrangements were satisfactory.
- My flight arrangements were very good for time and date.
- The flight arrangements were good.
- For me it is ok, Qatar Airways gave very good service. For future training programmes I suggest Sri Lanka airways are very good because it is a direct flight.
- Arrival flight arrangements were OK. Not sure of the departure if possible to be earlier.
- Overall, the arrangements were excellent thanks to Melanie's efficient follow-up and correspondences.
- Yes, usually we need 2 or 3 luggages for over 3 month stay. So we have to pay additional charge.

### **Q3) On arrival in the UK, were the instructions you received clear? Is there anything further in the instructions that may have helped you on your arrival? Were the arrangements made for you satisfactory? How could they be improved?**

- My instructions were very clear, very well thought out and presented.
- Absolutely clear and helpful.
- I have good instructions, it's very clear and more detail.
- The instructions were very good. The arrangements were very good and I don't think that there is something to improve.
- Instructions were very good and it was very helpful to me.

- The instructions were clear and detailed and very little of the details were missing, further restrictions will help me at all. The arrangements been made for me were satisfactory.
- As stated in 1) above the instruction were clear as those instructions sent by email were pursued accordingly.
- Yes. I don't have problem more.

**Q4) Was the accommodation arranged for your stay suitable?**

- Yes the accommodation was suitable.
- Yes it was, we had internet problem but it was fixed by the time.
- The accommodation arranged was very suitable.
- The hotel was good. The stay there was very good.
- Yes, it is good place.
- Yes, maybe more variety of food for breakfast.
- The accommodation was excellent.
- I think very good. Staff, facility and service are also good.

**Q5) Did the training meet your expectations? Did you get sufficient support from the training team?**

- The training did meet my expectations. Also I received full support on any query from the training team.
- Yes they did, and I received full support from the training team.
- The training met my expectations and I can learn a lot of things from the training team.
- The support from the training team was more than excellent.
- Training was very much helpful for me to get knowledge on cartography field.
- Training team done very good job. Thanks for all UKHO trainers.
- The training met most of my expectations I was expecting more exercises of hydrographic survey data assessment in a different meaning and some more theory part. The support from the training team was great, especially from the older men.
- The training met my expectation. I got a lot of support from the trainers especially in the ENC module which is new to me. The trainers were very helpful in assisting me with the practical exercises.
- Yes, I have a problem only English knowledge. I want more talking about cartographic but training team helped me every time.

**Q6) Was the course managed to your expectations?**

- It was very well managed into order to meet all the requirements.
- It was very well managed.
- This course managed very well. I have new things to learn every day.

- Definitely. The delivery was very good and we have all the support we need to go through the learning.
- Very much.
- It met my expectations as now after attending the ENC, I now realise what software's, procedures etc needs to be purchased or in place. The requirements that are expected from the organisation. It obviously will assist me in decision making in cartographic activities.

**Q7) Did you have enough support from the training team in enabling you to experience/enjoy outside work events?**

- Yes enough support was given and helpful.
- Yes I enjoy their support.
- The training team they are a very good team, they have a good knowledge and experience and they know how to teach for an international student.
- I think that the outside work was the best part of the course. It helps a lot and provides good experience.
- Yes they gave us maximum support and organised very good outside work and field trips.
- Yes.
- Yes I did. The trainers were excellent in and out of training time. I have been to interesting places during the course visits.
- Yes. Amply.

**Q8) Do you feel that the visits/presentations from other work areas within the UKHO were beneficial?**

- All visits within the UKHO was beneficial, learning of the UKHO procedure gave me a better overall understanding of the running and operations of a HO. It also gave ideas if improving my own HO.
- Yes they were, because we needed that. We did theory and practical in the classroom and after visits we could correct ourselves in many cases.
- It's very beneficial, for me it's like a new world everything's everywhere at The UKHO stand on "standard".
- Yes I do. Without visits the learning process will be insufficient. The staff from other work areas and RTs gave us good knowledge which helped us to gain more experience and better understanding of the course.
- Yes at all.
- It was beneficial especially to actually see how things are done in the real environment. Maybe 1 or 2 weeks attachment to the regional teams will be worth while.

**Q9) Any other comments?**

- The training staff from first contact up to the last day was very opening and helpful, and tried their best to meet my every demand.

**NIPPON FOUNDATION – UK HYDROGRAPHIC OFFICE**  
**UKHO Category B programme**

- I want to congratulate the staff of training for their support, and thanks to all UKHO staff.
- Thank you very much for your help and kindness.
- Thanks to all the trainers for their efforts.
- I want to thank all UKHO staff, trainers , UK government and the NIPPON Foundation for organising a remarkable training programme. Especially thanks to Mel you done a great job to succeed this training programme.
- More exercises in the digital world will be better and more theoretical staff about survey data assessment.
- Maybe an additional week can be added to the ENC mode. A reduction within the Data Assessment 5 week period. Thank you.
- Thanks training team and all staff.



THE UNITED KINGDOM  
HYDROGRAPHIC OFFICE

# Press Release

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## ANNEX D – Press Release.

09 January 2013

### UKHO International Training Success



The class of 2013



The United Kingdom Hydrographic Office (UKHO) has once again successfully delivered another of its accredited marine cartography courses to seven international students.

In September, students from the Hydrographic Organisations of Algeria, Bulgaria, Solomon Islands, Sri-Lanka, Thailand, Trinidad and Tobago, and Japan arrived in Taunton to complete the 15 week programme.

The course provided students with fundamental skills and knowledge to compile and maintain digital and paper navigational charts. It's the fifth course of a five year commitment sponsored by the NIPPON Foundation, a philanthropic organisation that focuses on the maritime industry. Over the years activities have expanded to include such areas as education, social welfare and public health, both within Japan and in more than one hundred countries to date.

Capacity Building Project of Japan.

Lynton Greatwood, UKHO Cartographic Training & Development Manager said: "the feedback on the course has continued to be excellent and the students are very supportive of each other forming a great team." The UKHO continues to develop the capacity hydrographic organisations around the world and we are very proud to be associated with this project.

Captain Jamie McMichael-Phillips, UKHO Deputy National Hydrographer, said: "their dedication to learn, and achieve high results is a credit along with their positive approach to taking this dedication home to their respective organisations to put their learning into practice".

Students and trainers were honoured to receive a visit from Rear Admiral Mustafa Iptes, Director of the International Hydrographic Bureau (IHB), Mr



Yamao, Special Projects Officer for Japan IHB, and Mr Kanazawa, Technical Advisor from Japan Hydrographic Association who presented certificates to the students at the successful completion of training.

In addition to completing practical assignments the students benefited from field trips to the Port Authorities of Bristol and Brixham.

The Nippon Foundation has also established a Fellowship for students, with the aim of creating an international community. The generosity of the NIPPON Foundation, coupled with the collaboration between UKHO Japanese partners and the support of the IHB have made it possible for the UKHO to deliver the course successfully.

## **ENDS**

For more information contact:

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## **Notes for Editors**

### **More...**

1. The UKHO, which is part of the Ministry of Defence, has been charting the world's oceans for more than 200 years with the primary aim of providing navigational services for the Royal Navy and merchant mariners to save and protect lives at sea. In addition it serves small craft and leisure mariners and provides a range of consultancy services.
2. The UKHO is a Trading Fund which means it is a government agency owned by the MoD with the freedom to trade commercially to generate revenue and cover running costs.
3. The UKHO also plays a central role, in support of the Maritime and Coastguard Agency, in discharging the navigation element of the UK's Safety of Life at Sea Treaty obligations for waters of UK national responsibility.
4. The UKHO produces a worldwide series of some 3,300 paper nautical charts and 160 publications under the Admiralty brand and has a growing portfolio of Electronic Navigational Charts (ENCs). These charts are sold globally and used by nearly 70 per cent of international shipping.
5. The NIPPON Foundation was established in 1962 as a non-profit philanthropic organisation, active both in Japan and abroad. Focus is largely on the maritime and shipping fields. Over the years activities have expanded to include such areas as education, social welfare and public health, both within Japan and in more than one hundred countries to date.

ANNEX E – NIPPON FOUNDATION FELLOWSHIP Certificate

NIPPON FOUNDATION FELLOWSHIP

**HYDROGRAPHIC DATA PROCESSING  
and MARINE CARTOGRAPHY**  
including specialism  
**ELECTRONIC NAVIGATIONAL CHARTS**

Following successful completion of the UKHO  
Category B recognised Marine Cartography course

*Michiko Komuta*

is now recognised as a member of the  
Japan Capacity Building Project  
NIPPON Foundation Fellowship



The Nippon Foundation



UKHO Chief Executive

*De Mancinelli*

Nippon Foundation Chairman

*Signature*

JHA Chairman

*山本 長*  
Date: December 2012