Darwin Initiative Main/Post/D+ Project
Half Year Report
(due 31 October 2016)

Project Ref No:	23-011
Project Title	Transforming marine resource management in the Republic of Congo
Country(ies)/Territory(ies)	Republic of Congo
Lead Organisation	University of Exeter (**UoE**)
Partner(s)	Wildlife Conservation Society (**WCS**) Association de Conservation de la Biodiversité (**Rénatura**) Ministère de l'Economie Forestière et du Développement Durable et de l'Environnement (**MEFDDE**)
Project Leader	Professor Brendan Godley
Report date and number (e.g., HYR3)	HYR1
Project website/ Twitter/ Blog/ Instagram etc	@wcs_congo | @BrendanGodley | @_KMETCALFE
Funder (DFID/Defra)	DFID

1. Outline progress over the last 6 months (April – Sept) against the agreed baseline timetable for the project (if your project has started less than 6 months ago, please report on the period since start up to end September).

Activities during the reporting period (April – September 2016) focused on developing a detailed annual work plan with project partners to determine the principal steps in project implementation, with an emphasis on constituency building amongst the main project stakeholders, especially government partners. To this end Dr Kristian Metcalfe, appointed Darwin Research Fellow (**DRF**) spent 6 weeks in-country during May and June 2016 with the principal project partners **WCS** (Mark Gately, Bryan Curran, Amy Pokempner and Jerome Mokoko-Ikonga) and **Rénatura** (Nathalie Bréheret and Eva Chauvet). During this period, three weeks were spent in Brazzaville (capital city) and in Pointe Noire (coastal/economic capital) where the project was officially presented to several representatives of the Ministère de l'economie forestiere et du developpement durable et de l'Environnement (**MEFDDE**), Ministère de l'Agriculture, de l'Elevage et de la Pêche (**MAEP**), Ministère des Mines et de la Géologie (**MMG**), as well as industrial fisheries organisations, most notably the Syndicat des Pêcheurs Industriels en Mer (**SOCOPEC**). Additionally, during this period project partners and stakeholders used the existing Marine Biodiversity Atlas for the Republic of Congo developed under Darwin Initiative Project 20-009 to: (1) define the immediate data gaps and requirements to help deliver a scientifically based marine protected area (MPA) network; and (2) discussed the immediate tasks to improve law enforcement and marine surveillance capacity.

The following section provides a more detailed breakdown of the activities completed under each project output to date:

Output 1: Marine Spatial Planning
Initial tasks completed have included the compilation of all available and required spatial data necessary to deliver a marine spatial plan in the Republic of Congo, comprising a total of 91 datasets. A review of this document with project partners revealed that whilst there are substantial data available on maritime zones/boundaries, national designations, oceanography,

physical environment, marine biodiversity (e.g. the location of marine turtle nesting beaches and foraging grounds), and the spatiotemporal distribution of artisanal fisheries there are still some significant data gaps. These included: (1) offshore biodiversity (e.g. marine mammals); (2) maritime vessel activity associated with industry; and (3) the spatiotemporal distribution of commercial/industrial fisheries.

To address (1) a marine mammal offshore survey has been schedule during peak season (October – November) along the coast of Congo. This survey will be led by **WCS** Conservation Scientist Tim Collins - **WCS**'s marine mammal expert for Central Africa and the Africa Coordinator for the IUCN SSC Cetacean Specialist Group. To address (2) and (3) the project has acquired and analysed Automatic Identification System (AIS) data on maritime vessel movements between 2012 and 2014 (n = 3 years). The resulting analyses identified ten sectors that are active in the Republic of Congo's waters (i.e. non-port service craft, port service craft, military and law enforcement, bulk carrier and cargo vessels, tankers, offshore/industry vessels, research vessels, fishing vessels, passenger vessels and recreation vessels) with four sectors (e.g. tankers, offshore/industry, passenger, bulk carrier and cargo vessels) accounting for > 90% of the vessels operating in the Republic of Congo's EEZ. These data not only highlighted the scale of movement of vessels associated with the petrochemical sector, but they also revealed for the first time the areas within which industrial fishing vessels operate (see **Appendix 1 Figure 1**).

Three local staff members from Conkouati-Douli National Park (**CDNP**) were provided training associated with a fisher survey instrument in May and June 2016 by the **DRF**. The fisher survey has been designed to identify the economic contribution of small-scale fisheries to local livelihoods and employment by providing estimates of annual revenue generation, operating costs, net income, profitability and dependency. These data will be used to map the socioeconomic contribution, and vulnerability of small-scale fisheries to illegal unreported and unregulated (IUU**)** fishing effort thereby providing information that allows fisheries governance to be shaped according to the specificities and vulnerability context of those operating in this sector. Of the 260 individuals targeted for this survey (i.e. 10% of the estimated number of small-scale fishers in Congo) the three research assistants have gathered data from a total of 90 respondents thus far. This work will continue until the end of the calendar year, with the specific aim of obtaining a sample of interviews from all known landing sites. Additional training on conducting Basic Necessity Surveys will be provided to local staff at **CDNP** by **WCS** staff Norbert Gami (**WCS**'s Socio-Economic Senior Technical Advisor) and Diane Detoeuf (**WCS'**s Socio-Economic Technical Assistant). This survey will be used to assess current levels of poverty and well-being (defined by local perceptions) within and across communities within the park (*See Training Manual: Wilkie, D., Wieland, M. and Detoeuf, D. 2015. A guide to the modified Basic Necessities Survey: Why and how to conduct BNS in conservation landscapes. WCS, New York, USA*). Training is due to commence in October 2016 with surveys being rolled out across several communities (including those that are fisheries dependent) in December 2016. Follow up surveys will be implemented towards the end of the project to assess trends over time as a result of management actions implemented within the park (e.g. increased monitoring and enforcement);

Rénatura, have been continuing to work with the Government to create a new MPA in the Bay of Loango near Pointe Noire – one of only two known mainland foraging grounds for green and hawksbill turtles in Central Africa. At the recent 'Our Ocean' conference in Washington, DC (September 2016) the government of Congo announced its intention to create a *"special marine conservation zone of 1,970 km^2 in Loango Bay . . . to protect sea turtles and sharks."* This will increase the amount of Congo's EEZ under formal protection from 3% to 8%. Significant work remains to make this MPA a reality; however, this represents a positive step for the management of Congo's marine resources. To support this initiative Darwin project staff (Metcalfe and Godley) have supported **Rénatura** with data analysis relating to sea turtle captures and nesting effort in this region.

Output 2: Enforcement Capacity

WCS have scheduled a training session for ecoguards from **CDNP** in late November 2016 which will include both a comprehensive evaluation of all existing ecoguards employed by

CDNP, assessing their physical, mental, and psychological suitability for the role. The training will focus on patrol design, discipline, small unit tactics and survival, tactical skills, and will include a specific module on maritime law enforcement, surveillance and safety. This training session will be conducted by experts from Maisha Consulting, who have provided a number of ecoguard training sessions elsewhere in Congo and Central Africa. Maisha will work in partnership with Colonel Aristide Botonga, the focal point for paramilitary training within the Ministère de l'economie forestiere et du developpement durable et de l'Environnement (**MEFDDE**), as well as two staff from the local military headquarters. To support local enforcement capacity, handheld global position system (GPS) units have been acquired, which will be used by ecoguards to record and compile patrol data using SMART (Spatial Monitoring and Reporting Tool) software.

Output 3: Fisheries Analysis
As a result of engagement with fisheries agencies the project will be providing analytical advice and support to the Direction Départemental de Ministère de l'Agriculture, de l'Elevage et de la Pêche de Pointe Noire to analyse data from a new vessel tracking system that is in the process of being deployed. However, to ensure that some data is available should any problems arise with the new system the project will be also be deploying GPS trackers on industrial fishing vessels. This will build on new information on the spatiotemporal distribution of small-scale fisheries gained by the analysis of regional AIS data. This program of work is due to commence in November 2016. We also note that participatory research with small-scale fisheries sector supported by funding from a previous Darwin Initiative project 20-009 and the current project has recently been published (See *Metcalfe, K., Collins, T., Abernethy, K.E., Boumba, R., Dengui, J.C., Miyalou, R., Parnell, R.J., Plummer, K.E., Russell, D.J.F., Safou, G.K., Tilley, D., Turner, R.A., Vanleeuwe, H., Witt, M.J., Godley, B.J., 2016. Addressing uncertainty in marine resource management; combining community engagement and tracking technology to characterise human behavior. Conservation Letters*). These communities continue to be engaged, with 19 (67%) of the 28 known landing sites already involved in participatory data collection as part of this new project.

2a. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.

As detailed, several meetings and consultations were conducted with project stakeholders and, following these meetings, it was decided to extend the scope of the stakeholder workshop to include a wider range of participants, particularly at the government level. In addition, the two ministers most closely involved in the implementation of the project – Ministère de l'economie forestiere et du developpement durable et de l'Environnement, Ministère de l'Agriculture, de l'Elevage et de la Pêche —were replaced in May 2016 (following the recent presidential election in April 2016). It was therefore decided to allow the new ministers time to nominate their new technical teams and take a direct role in inviting participants to the workshop. The stakeholder workshop was therefore rescheduled to take place in November 2016. This delay will not have any impact on the project outputs and/or budget, and has in fact allowed more time to analyse new data that will be presented at the stakeholder workshop (*e.g. maritime vessel movements that was identified as a key data gap*).

2b. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?

Discussed with LTS:	No
Formal change request submitted:	No
Received confirmation of change acceptance	n/a

3a. Do you currently expect to have any significant (e.g., more than £5,000) underspend in your budget for this year?

Yes ☐ **No** ☒ Estimated underspend: £0.00

3b. If yes, then you need to consider your project budget needs carefully. Please remember that any funds agreed for this financial year are only available to the project in this financial year.

If you anticipate a significant underspend because of justifiable changes within the project please submit a rebudget Change Request as soon as possible. There is no guarantee that Defra will agree a rebudget so please ensure you have enough time to make appropriate changes if necessary.

4. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?

We would like to note that one of the principal project partners, **WCS** have hired Bryan Curran in May 2016 to be the new coordinator to manage **CDNP** (replacing Hilde VanLeeuwe who has moved onto a new role). Bryan has extensive experience in protected area management, having worked in the Central Africa region for over 25 years. Finally, the **UoE** has secured an extension to its existing research permit from the Ministère de la Recherche Scientifique et l'Innovation Technologique (**MRSIT**) that is valid until October 2019. Thereby, allowing **UoE** staff to continue to support local partners beyond the life of the project, that is due to end in September 2018.

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document.

Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but should also be raised with LTS International through a Change Request.

Please send your **completed report by email** to Eilidh Young at Darwin-Projects@ltsi.co.uk . The report should be between 2-3 pages maximum. **Please state your project reference number in the header of your email message e.g., Subject: 22-035 Darwin Half Year Report**

Appendix 1

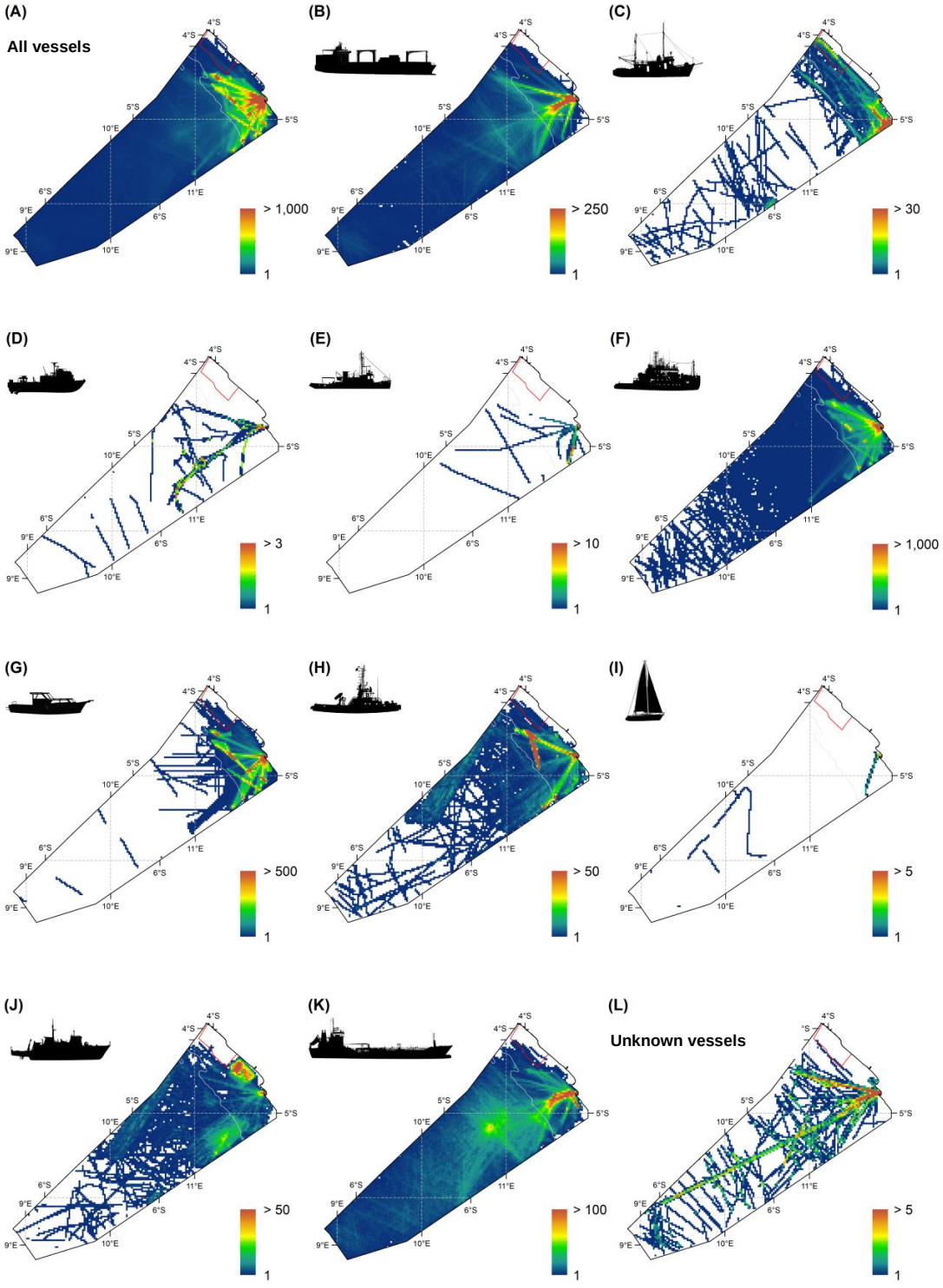

Figure 1. Mean annual number of vessel transits for maritime vessels in the Republic of Congo's exclusive economic zone (EEZ) derived from Satellite Automatic Identification System (S-AIS) data between 2012 and 2014 (n = 3 years). Individual plots illustrate activity for: (A) all vessels; (B) bulk carriers and cargo ships; (C) fishing vessels; (D) military and law enforcement vessels; (E) non-port service craft; (F) offshore (industry) vessels; (G) passenger vessels; (H) port-service craft; (I) recreational vessels; (J) research (industry) vessels; (K) tankers; and (L) unknown vessels. Note black line indicates the limits of Congo's EEZ, and red line the marine limits of Conkouati-Douli National Park.