

ASSEMBLE



ASSOCIATION OF EUROPEAN MARINE BIOLOGICAL LABORATORIES EXPANDED

Acronym: ASSEMBLE Plus

Title: Association of European Marine Biological Laboratories Expanded

Grant Agreement: 730984

Deliverable D14.1

CNSI-NIOZ TA assessment report

September 2022

Lead parties for Deliverable: CNSI

Due date of deliverable: M60

Actual submission date: M60

All rights reserved

This document may not be copied, reproduced or modified in whole or in part for any purpose without the written permission from the ASSEMBLE Plus Consortium. In addition to such written permission to copy, reproduce or modify this document in whole or part, an acknowledgement of the authors of the document and all applicable portions of the copyright must be clearly referenced.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 730984. This output reflects the views only of the author(s), and the European Union cannot be held responsible for any use which may be made of the information contained therein.

GENERAL DATA

Acronym: **ASSEMBLE Plus**

Contract N°: **730984**

Start Date: **1st October 2017**

Duration: **60 months**

Deliverable number	D14.1
Deliverable title	CNSI TNA Assessment report
Submission due date	M60
Actual submission date	M60
WP number & title	WP14 – TA3 Transnational access to CNSI
WP Lead Beneficiary	NIOZ
Participants (names & institutions)	

Dissemination Type

Report	<input checked="" type="checkbox"/>
Websites, patent filling, etc.	<input type="checkbox"/>
Ethics	<input type="checkbox"/>
Open Research Data Pilot (ORDP)	<input type="checkbox"/>
Demonstrator	<input type="checkbox"/>
Other	<input type="checkbox"/>

Dissemination Level

Public	<input checked="" type="checkbox"/>
Confidential, only for members of the consortium (including the Commission Services)	<input type="checkbox"/>



Document properties

Author(s)	Kimani Kitson-Walters, Johan Stapel, CNSI
Editor(s)	Davide Di Cioccio, EMBRC-ERIC
Version	

Abstract

This deliverable describes the outcomes of the trans-national access programme (TNA) offered at CNSI, in terms of: installations available, applications received and user's projects performed (through on-site and / or remote access), users' profile and other stats (country of origin, career profile, type of organization, satisfaction of the services used).



Table of Contents

1.	Introduction.....	5
2.	Objective.....	5
3.	Outcomes of the Transnational Access programme	5
3.1	Overview of the access provider	5
3.2	Installations offered	6
4.	Applications received	6
4.1.	Origin country of applicants	6
4.2.	Applicants profile	6
4.2.1.	Home institution type	6
4.2.2.	Career status	6
5.	User hosted and their stats	6
5.1.	Projects completed.....	6
5.2.	Installations used.....	6
5.3.	User satisfaction	7
5.4.	Projects not completed or cancelled.....	7
6.	Use of resources	7
7.	Conclusion	7
7.1.	Experiences gained regarding giving access to users.....	7
7.2.	Difficulties encountered and overcome.....	7
7.3.	Reflections on collaborations or strict service use in terms of benefits for institute and in-house scientists, future collaborations with users.....	7
7.4.	Other impacts.....	8
8.	Appendice.....	9
8.1.	List of user-projects completed at CNSI	9



1. Introduction

Transnational Access in ASSEMBLE Plus is provided to a total of 36 marine stations in 15 countries. In the whole consortium, the stations provide access to a high diversity of marine environments; from the high Arctic (IOPAN) and Antarctic (UKRI-BAS) to the tropics (IUI and NIOZ-CNSI) and the mid-Atlantic ridge (CCMAR and IMAR). Within mainland Europe, access is provided to the Mediterranean, the Atlantic and the Baltic seas. Habitats comprise estuaries (e.g. SZN, ISMAR, CCMAR, AWI, IOPAN, UG), mega-tidal seas (SBR), cold-water coral reefs (KMRS, NUIG, SAMS), brackish seas and sea ice communities (IOPAN, TSZ, ARI, HBS), near-shore deep sea (HCMR, IMEV, NUIG, UGOT, SAMS) and volcanic seeps (high CO₂ – low pH; HCMR, SZN, IMAR). The TA-providing stations (access providers) have modern research laboratories and a wide array of specialized research facilities to support internal and external users. Several of these also have technological backup of nearby university institutions.

This deliverable describes the outcomes of the trans-national access programme (TNA) offered at CNSI, in terms of: installations available, applications received and user's projects performed (through on-site and / or remote access), users' profile and their stats (country of origin, career profile, type of organization, satisfaction of the services used).

2. Objective

This deliverable intends to show the outcomes of the transnational access programme executed at CNSI, hence contributing to the ASSEMBLE Plus objectives:

- Enhance transnational access to a coordinated set of state-of-the-art European infrastructures for marine biology and ecology;
- Improve service provision by these infrastructures in line with their areas of excellence in marine biology and ecology, with emphasis on developing novel key enabling technologies and data solutions;
- Strengthen complementarity and interoperability within the consortium and with related infrastructures;
- Lay the logistical and strategic foundations to expand the coverage of the European Marine Biological Resource Centre (EMBRC) in both its scope and its geographical distribution and to consolidate its long-term sustainability.

3. Outcomes of the Transnational Access programme

3.1 Overview of the access provider

CNSI offers access to the Eastern Caribbean island of St Eustatius ecosystem and its territorial waters, and the nearby and highly biodiverse Saba Bank, the largest submarine atoll in the Atlantic Ocean. The island is volcanic in origin with lush vegetation, ranging from primary rain forest to cactus and woodlands, seagrass beds and coral reefs. In the underwater coastal area coral reef bombs and fingers, patch reefs, fringing reefs and drop off spur and groove systems, sandy bottom and seagrass beds form



a varied landscape, home to a large number of species. The lab includes basic lab equipment, a TRAACS nutrient analyser, a Coulter Counter for particle size distribution measurements, an epifluorescence microscope, a microscope and binocular microscopes.

3.2 Installations offered

CNSI offered access to a marine station with a specific set of installations:

- Mesocosm
- Small research Vessel
- Laboratory

4. Applications received

4.1. Origin country of applicants

CNSI has received a total of 26 applications. Among these, 16 applicants were based in European countries while 10 applicants came from other non-European countries.

4.2. Applicants profile

4.2.1. Home institution type

Applicants were mostly based in academic institutes (universities: 19.2 %; research organizations: 80.8 %).

4.2.2. Career status

The most recurring career profile of the applicants were senior scientists, postdocs and PhD students.

5. User hosted and their stats

5.1. Projects completed

Overall, CNSI has hosted 12 projects for a total of 19 users. 12 projects were carried out on-site, 0 in remote access. The list of projects completed at CNSI is available in "[Appendix 1 – List of user-projects completed](#)" further below.

5.2. Installations used

The installations used were the laboratory and the small research vessel. The mesocosm was not used due to lack of interest. One application requested mesocosm access, but this project was cancelled due to COVID-delay.



5.3. User satisfaction

Overall, users have positively evaluated the services offered (Very good: 25 %; Good: 50 %, No response: 25%). In general, comments from the users were good. CNSI did receive some complaints about the limited maximum supported access time and about lengthy refunding procedures.

5.4. Projects not completed or cancelled

COVID is the main reason why projects which passed the evaluation stage were not completed. Travel restrictions to the island only allowed residents to travel to and from the island for almost 2 years. The total of planned projects that were not completed or cancelled was 50% of the awarded applications.

6. Use of resources

TNA contract number	216	266	8413	311.2	8329	8519	10730	10887.1	11941	13467	13457	13337	Total
Names	Matan Moshe Yuval and Aviad Avni	Inga Martinek and Roman Kucht	Tamar Guy-Haim and Dar Golomb	Gidon Winters and Chiara Conte	Aschwin Engelen and Ana Isabel Magalhães Tavares	Gil Rilov and Martina Mulas	Dalit Meron and Shai Einbinder	Roksana Majewska	Charlotte Hopkins	Shevi Rothman	Francesca Alvisi	Neil Burns	
Boat use (hours)	36,25	19,25	19,79	9,67	24,25	15,04	1,38	3,50	22,50	13,13	10,75	22,50	198,00
Boat captain (hours)	36,25	19,25	20,79	10,67	24,25	17,54	1,38	3,50	22,50	13,13	10,75	22,50	202,50
Lab use (days)	-	13,00	3,00	3,25	-	3,75	1,57	-	-	10,69	6,75	-	42,01
Mesocosm use (hours)	-	-	-	-	-	-	-	-	-	-	-	-	-
General support (months)	0,09	0,17	0,20	0,15	0,28	0,23	0,11	0,17	0,17	0,24	0,17	0,17	2,15
Specification general support:													
- extra staff on boat during boat trips	-	0,09	0,01	0,01	0,15	0,02	0,01	-	0,01	0,03	-	0,01	0,34
- administrative	-	-	0,03	0,03	0,04	0,03	0,01	0,13	0,04	0,01	0,05	0,04	0,43
- general support scientific (inclusive support in lab)	0,09	0,08	0,16	0,11	0,08	0,18	0,08	0,04	0,12	0,20	0,12	0,12	1,39
	0,09	0,17	0,20	0,15	0,28	0,23	0,11	0,17	0,17	0,24	0,17	0,17	2,15

The total amount of person / month used was 2.15.

7. Conclusion

7.1. Experiences gained regarding giving access to users

Gaining experience in working with a variety of researchers from different ethnic and social backgrounds as an important asset contributing to mutual understanding when furthering an international scientific career.

7.2. Difficulties encountered and overcome

None

7.3. Reflections on collaborations or strict service use in terms of benefits for institute and in-house scientists, future collaborations with users

The TNA programme served as an important networking opportunity for CNSI's marine research staff and enabled them to (counter-) visit other marine laboratories in Europe which may result in future collaborations and opening a wider career window. For CNSI as a marine



lab future collaborations are not relevant as the facility is closing by the end of 2022 due to discontinuation of subsidy.

7.4. *Other impacts*

The TNA programme realised a broader knowledge about the existence of Caribbean Netherlands islands and the opportunities the islands offer for relevant marine research in European overseas tropical territories and outer regions. This may prove to have an important and considerable socio-economic impact given the small size of these small islands and their communities.



8. Appendice

8.1. *List of user-projects completed at CNSI*

- Niche to Ecozone- Network Analysis of Benthic Structures Through Advanced 3D photogrammetry. Users: Matan Moshe Yuval, Aviad Avni (University of Haifa)
- A first study of myxozoan diversity in the Caribbean: new insights into host range and life cycles? Users: Inga Martinek, Roman Kuchta (Swedish Museum of Natural History)
- Differences in morphological, physiological and genetic traits between native and invasive populations of *Halophila stipulacea*. Users: Gidon Winters, Chiara Conte (The Dead Sea Arava Science Center)
- Marine macrophyte population genetics. Users: Aschwin Engelen, Ana Isabel Tavares (Centro de Ciencias do Mar – CCMAR)
- The seagrass *Halophila stipulacea* as an invasive ecosystem engineer. Users: Tamar Guy-Haim, Dar Galomb (Israel Oceanographic and Limnological Research)
- Assessing carbon uptake and grazing activity on an invasive seagrass in the Caribbean Sea. Users: Gil Rilov, Martina Mulas (Israel Oceanographic and Limnological Research)
- Do the lionfish microbiome play a role in its invasion success? Users: Dalit Meron, Shai Einbender (University of Haifa)
- Biodiversity and ecology of sea turtle-associated diatoms User: Rokšana Majewska (North-West University)
- A novel multi-threat Risk Evaluation and socio-Ecological Framework for tropical MPAs. User: Charlotte Hopkins (University of Hull)
- The importance of landscape context and habitat networks in governing abundance and habitat occupancy of reef fish. User: Neils Burn (Scotland's Rural College)
- MEioBenthic response to OXYgen depletion in Atlantic TOURistic-impacted coastal areas and evaluation of sedimentary environment role in the development of hypoxia phenomena. Users: Elisa Baldrighi, Francesca Alvisi
- From coast to coast: host-parasite networks of the invasive lionfishes *Pterois miles* (Bennett) and *P. volitans* (L.) (Actinopterygii: Scorpaenidae). User: Shevy Rothman (Tel Aviv University)

