
**MEDITERRANEAN ACTION PLAN (MAP)
REGIONAL MARINE POLLUTION EMERGENCY RESPONSE CENTRE FOR
THE MEDITERRANEAN SEA (REMPEC)**

Regional Expert Meeting on the Possible Designation of the
Mediterranean Sea, as a whole, as a Nitrogen Oxides
Emission Control Area (Med NO_x ECA) pursuant to
MARPOL Annex VI

REMPEC/WG.63/8
30 October 2026
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Kalkara, Malta, 7-8 October 2026

REPORT

**REGIONAL EXPERT MEETING ON THE POSSIBLE DESIGNATION OF THE
MEDITERRANEAN SEA, AS A WHOLE, AS A NITROGEN OXIDES EMISSION CONTROL
AREA (MED NO_x ECA) PURSUANT TO MARPOL ANNEX VI**

Kalkara, Malta, 7-8 October 2026

This activity was financed by the International Maritime Organization (IMO)'s Technical Cooperation Climate and Clean Air Thematic Programme and the Mediterranean Trust Fund (MTF), and was implemented by the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), in cooperation with the IMO.

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SUMMARY SHEET

Title of the Meeting:	Regional Expert Meeting on the possible designation of the Mediterranean Sea, as a whole, as a Nitrogen Oxides Emission Control Area (Med NO _x ECA) pursuant to MARPOL Annex VI
Host:	Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC)
Venue and date:	Chaplain's House, Villa Bighi, Kalkara, Malta 7-8 October 2026
Type:	Regional
Organised by:	REMPEC, in close cooperation with the International Maritime Organization (IMO)
Supported by:	IMO's Technical Cooperation Climate and Clean Air Thematic Programme and the Mediterranean Trust Fund (MTF)
Number of Participants and Number of Countries and/or Organisations:	35 participants from 21 out of 22 Contracting Parties to the Barcelona Convention, as well as representatives from relevant regional and international organisations

Summary

This document presents the Report of the Regional Expert Meeting on the possible designation of the Mediterranean Sea, as a whole, as a Nitrogen Oxides Emission Control Area for (Med NO_x ECA) pursuant to MARPOL Annex VI, which was held in Kalkara, Malta, from 7 to 8 October 2026.

The principal objectives of the Meeting were twofold: to provide for a greater understanding of the requirements associated with the implementation and enforcement of a Med NO_x ECA; and to discuss and finalise the draft IMO MEPC submission for the adoption of a Med NO_x ECA, as prepared by REMPEC in close consultation with the MAP NO_x ECA Technical Committee of Experts (NECA TCE), for its transmission to the Seventeenth Meeting of the Focal Points of REMPEC.

The discussions of the Meeting are summarised in this Report and the Conclusions and Recommendations adopted by the Meeting are set out in **Annex VI** thereto.

The Report of the Meeting will be transmitted, by the REMPEC Secretariat, to the Seventeenth Meeting of the Focal Points of REMPEC for consideration and further guidance.

Key words: Air pollution from ships, Clean air in shipping, Mediterranean Sea, Emission Control Area, Med NO_x ECA, MARPOL Annex VI, designation, ratification, implementation, enforcement, Port State Control, MEPC submission

WBS element No: TC/2606-02-2000

Coordinator: Ivan Sammut (REMPEC)

INTRODUCTION

1.1 The Regional Expert Meeting on the Possible Designation of the Mediterranean, as a whole, as a Nitrogen Oxides Emission Control Area (Med NO_x ECA), pursuant to MARPOL Annex VI, hereinafter referred to as the Meeting, was convened in Kalkara, Malta from 7 to 8 October 2026.

1.2 The Meeting was organised by REMPEC pursuant to the Programme of Work and Budget for 2026-2027 of the Mediterranean Action Plan of the United Nations Environment Programme (UNEP/MAP), adopted by the Twenty Fourth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean ("the Barcelona Convention") and its Protocols (COP 24), which was convened in Cairo, Egypt, in December 2025. It was financed by the IMO's Technical Cooperation Climate and Clean Air Thematic Programme and the Mediterranean Trust Fund (MTF).

1.3 The principal objectives of the Meeting, as stated in document WG.63/1/1, were:

- .1 to raise awareness on MARPOL Annex VI, and provide for a greater understanding and appreciation of the requirements for implementation and enforcement of the Med NO_x ECA, to support Governments' efforts towards ratification and more effective implementation, compliance and enforcement, both as flag States and port States, including the sharing of experience and lessons learned from the designation of other similar ECAs, over the first day of the Meeting; and
- .2 to discuss the draft IMO MEPC submission, prepared by REMPEC in close consultation with the MAP NO_x ECA Technical Committee of Experts (NECA TCE), with a view to finalisation and onward transmission to the Seventeenth Meeting of the Focal Points of REMPEC (to be tentatively held in May 2027).

VENUE, DATES, ROLES AND PARTICIPANTS

1.4 The venue for the Meeting was:

Chaplain's House, Xjenza Malta, Villa Bighi,
Dawret Fra Giovanni Bichi, Kalkara, KKR 1320, Malta

1.5 The Meeting was held on 7 and 8 October 2026 at the above venue that included all amenities needed. The Meeting was held back-to-back with the High-Level Meeting commemorating REMPEC's 50th Anniversary that took place the day before, on Tuesday 6 October 2026, at the same location.

1.6 The choice of venue proved to be conducive to the Meeting success as it had all the facilities required for the purpose. The venue was equipped with microphones for each individual and interpretation facilities.

1.7 The Government of Malta contributed to hosting the session and REMPEC conducted all the logistics for the Meeting, arrangements of facilities for use by the participants, REMPEC consultants and speakers, reproduction of materials, operation of sound/video equipment and simultaneous English and French interpretation.

1.8 The Meeting was attended by delegations from the following Contracting Parties to the Barcelona Convention:

ALBANIA	LEBANON
ALGERIA	LIBYA
BOSNIA AND HERZEGOVINA	MALTA
CROATIA	MONACO
CYPRUS	MONTENEGRO
EGYPT	MOROCCO
EUROPEAN UNION	SLOVENIA
FRANCE	SPAIN
GREECE	TUNISIA
ISRAEL	TÜRKİYE
ITALY	

by representatives from the following organisations of the United Nations:

- INTERNATIONAL MARITIME ORGANISATION (IMO)
- UNITED NATIONS ENVIRONMENT PROGRAMME – MEDITERRANEAN ACTION PLAN (UNEP/MAP)

by a representative from the following other organisation:

- EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT (EBRD)

1.9 A complete list of participants is available in **Annex I** to this report.

OPENING OF THE MEETING

1.10 The Meeting was opened by the Head of Office of REMPEC, Mr Ivan Sammut, on Wednesday, 7 October 2026 at 0900 hours objectives of the Meeting. He also welcomed the IMO representative Dr Gyorgyi Gurban (Head of Projects Implementation), the UNEP/MAP representative Ms Tatjana Hema (Coordinator), the EBRD representative Mr James Falzon (Associate Director), Ms Marie Caillerie and Mr George Mallouppas (consultants for REMPEC).

1.11 Mr Sammut expressed appreciation for the financial support provided by the IMO's Technical Cooperation Climate and Clean Air Thematic Programme, the Mediterranean Trust Fund (MTF) and the Government of Malta.

1.12 Mr Sammut expressed his particular appreciation to the members of the NECA TCE and for their work over recent years which has been fundamental to bring in the process to its present stage, adding that REMPEC valued the expertise, time and commitment that experts and their administrations have invested in this work.

ORGANISATION OF THE MEETING

Rules of Procedure

1.13 The Meeting agreed to apply, mutatis mutandis, the Rules of procedure for Meetings and Conferences of the Contracting Parties to the Convention for the Protection of the

Mediterranean Sea against Pollution and its related Protocols (UNEP/IG.43/6, Annex XI) to its deliberations.

Election of Officers

1.14 The Meeting unanimously agreed to elect the following officers of the Meeting:

Ms Ivana Marović Gugić (Croatia)	Chairperson
Mr Muharrem Trupja (Albania)	Vice-Chairperson
Ms Evangelia Pouli (Malta)	Rapporteur

Working Languages

1.15 The Meeting noted that the working languages were English and French. Simultaneous interpretation services in both languages were provided during the Meeting. All working documents were made available in both official languages of the Centre, i.e. in English and in French. Information documents were made available in their original language, unless a translation was provided in the second working language.

AGENDA ITEM 1: ADOPTION OF THE AGENDA

1.16 The Chairperson thanked the Meeting for supporting her election. Ms Marović Gugić explained that the work of the Meeting would start with technical and regulatory discussions, before reviewing the draft IMO MEPC submission concerning the possible designation of the Mediterranean NO_x ECA. She recalled that the objective was to conduct a focused and constructive discussion that enables the Meeting to provide clear guidance, to agree amendments where necessary, and advance the draft submission towards consideration by the Seventeenth Meeting of the REMPEC Focal Points, tentatively scheduled for May 2027.

1.17 The Chairperson proposed that the Provisional Agenda, as set out in document REMPEC/WG.63/1 and annotated in document REMPEC/WG.63/1/1, be adopted.

1.18 The Meeting adopted the Agenda reproduced in **Annex II** to this report. The list of documents is set out in **Annex III** thereto.

1.19 The Meeting was addressed by Ms Tatjana Hema, Coordinator of the UNEP/MAP. Ms Hema recalled that the possible Med NO_x ECA represented an important opportunity to advance the common commitment to a cleaner and healthier Mediterranean. She also noted that the recommendation for the Med NO_x ECA not to enter into force before 2032, reflected the need to allow sufficient time for countries and the maritime sector to prepare while maintaining the ambition to reduce harmful emissions, and she acknowledged that in the Mediterranean region Contracting Parties have different levels of capacity and preparedness. Ms Hema wished constructive discussion and concrete progress to the Meeting.

ANY OTHER BUSINESS

1.20 Under this agenda item, the Secretariat proposed to include a brief presentation on the updated Study on Trends and Outlook of Marine Pollution from shipping activities and of maritime traffic and offshore activities in the Mediterranean, which should take place before Agenda Item 2 as it would provide background data on air pollution trends and help participants understand the key trends. The updated Study, covered several topics which were directly relevant to the discussion on the implementation of NO_x Tier III limits in the Mediterranean area.

1.21 The consultant for REMPEC, Mr Georges Malloupas (ITex), shared key figures on the evolution of SO_x and NO_x emissions and explained the drivers behind the recent decrease of SO_x and rise of NO_x emissions. He also presented the share and distribution of emissions based on ship and fleet type and ship operating modes.

1.22 Participants asked questions for clarification and shared their views. Feedback was shared on existing difficulties, notably with the availability of bunker fuels complying to fuel quality standards, in the context of fuel SO_x limit in the Med ECA. The Chairperson concluded the session in highlighting that it was important to use the evidence to guide priorities and to translate the findings of the updated Study into concrete action.

1.23 The Meeting took note of the information provided and the comments made.

1.24 Having noted the information provided, the Meeting:

- .1 **took note** of the presentation on the updated Study on Trends and Outlook – Air Pollution Scenario, and exchanged views on the projected trends in emissions from shipping and their implications for air quality in the Mediterranean region; and
- .2 **recognised** the relevance of the findings of the updated Study on Trends and Outlook, to the ongoing consideration of the possible designation of the Mediterranean Sea, as a whole, as a NO_x ECA and recommended that the relevant findings and projections be taken into account, as appropriate, in the further development and refinement of discussions on the possible designation of the said NO_x ECA.

AGENDA ITEM 2: COMPLIANCE WITH NO_x TIER III STANDARDS

2.1 This item was structured as an awareness-raising session split in three parts: technical aspects; implementation and enforcement aspects related to the NO_x Tier III standards under MARPOL Annex VI and an interactive session based on practical case studies and national experience.

2.2 In the first presentation, the REMPEC consultant, Ms Marie Caillerie, recalled the principles of marine diesel engine and NO_x formation, and provided an overview of Tier III compliance methods, including Exhaust Gas Recirculation (EGR), Selective Catalytic Reduction (SCR) and alternative fuels.

2.3 The second presentation addressed the practical implementation and enforcement of the NO_x Tier III requirements. The engine and ships documents required under MARPOL Annex VI were explained and the basics of the survey regime (HSSC Guidelines and the role of Recognised Organisations) and Port State Control were recalled. The roles and responsibilities of Administrations, and their obligations arising under regulation 13 on NO_x emissions and regulation 17 on port reception facilities were also discussed.

2.4 Participants shared their comments and asked questions on the presentations. During the ensuing discussions, clarifications were sought on the use of urea in SCR and its impact on CO₂ emissions and wastewaters; on the use of SCR in combination with high sulphur fuels; on the regional arrangements for port reception facilities; on the developments within the IMO regulatory framework towards a holistic approach of the different emissions and their control strategies.

2.5 The Meeting took note of the information provided and the comments made.

2.6 An interactive session was then initiated by Ms Caillerie, as an opportunity for participants to share their national experience, concerns, expected barriers and lessons learned. The consultant provided guidance in the form of a questionnaire, with a number of guiding questions, such as:

- Within your Administration, who is in charge of inspections during PSC?
- Do you have access to support and assistance in terms of training for your surveyors or inspectors?
- Following the recent implementation of the Med SO_x ECA, could you cite 2 or 3 major obstacles faced at national or international levels?

2.7 Several participants shared information on how their Port State control authority operates for the enforcement of MARPOL Annex VI, and some shared the difficulties they face, for example in terms of human resources. Participants provided feedback on obstacles experienced for the uniform and efficient implementation of the Med SO_x ECA, including a lack of balance between Parties and non-Parties to MARPOL Annex VI; the burden of fuel sampling campaigns; and repeated issues with Bunder Delivery Notes.

2.8 Other participants shared their “best practices”, for example direct dialogue with the industry, in particular shipyards; studies initiated with the national fleet to understand fleet renewal aspects; or high targets reached in terms of PSC inspections.

2.9 One delegation highlighted the importance of continued and targeted technical assistance, capacity-building and, where appropriate, financial support, taking into account the different levels of readiness and capabilities of Mediterranean countries, while acknowledging the continuous efforts of IMO and REMPEC in facilitating such support and fostering regional comprehension.

2.10 In conclusion, it was recalled that the implementation of a NO_x ECA differs from a SO_x ECA, for several reasons: no fuel sampling and analysis are required from PSC; Tier III limits are applicable to new built ships; and engine manufacturers are the key stakeholders being impacted.

2.11 The Meeting took note of the information provided, of the comments made and of views shared during the interactive session.

2.12 Having noted the information provided, the Meeting:

- .1 **acknowledged** the importance of the MARPOL Convention and its Annexes, as the cornerstone of the international regulatory framework to prevent pollution from ships, and encouraged Contracting Parties to ensure their effective implementation and enforcement at national level;
- .2 **highlighted** that international shipping must be regulated at the global level for any control regime to be effective (e.g. to prevent pollution from ships) and to maintain a level playing field for all ships;
- .3 **acknowledged** the importance of MARPOL Annex VI as a key instrument in addressing air emissions from ships, including the SO_x and NO_x, and **recognised** its relevance to improving air quality and protecting human health and the environment;

- .4 **welcomed** the detailed explanation of the provisions under MARPOL Annex VI, particularly those related to equivalents, notifications, surveys, and certification, as well as the key technical requirements of the NO_x Technical Code, concerning marine diesel engines and compliance with emission standards; and
- .5 **noted** the detailed explanation of the provisions under MARPOL Annex VI, particularly those related to effective harmonized implementation and enforcement, concerning the NO_x Technical Code.

AGENDA ITEM 3: OTHER ASPECTS RELATED TO REGULATION 13 AND NO_x TIER III STANDARDS

3.1 Under this agenda item, the REMPEC consultant, Ms Caillerie focused on particularities of regulation 13 of MARPOL Annex VI that can give rise to questions in practical implementation. The importance of the ship's date of construction and the "three-date" application criteria were recalled. The session also addressed specific cases and exemptions, with a focus on the yachting industry; ships fitted with smaller engines; and provisions for the access to shipyards located within NO_x ECAs.

3.2 Participants shared their comments and asked questions. Clarifications were sought on some aspects, including on yachts used for recreational purposes; and on the existing IMO guidance related to alternative design and arrangements.

3.3 The Meeting took note of the information provided and the national experience shared.

3.4 Having noted the information provided, the Meeting:

- .1 **recognised** the importance of a robust technical and regulatory basis for the designation of a NO_x ECA, supported by appropriate emissions, shipping activity and air-quality information and an assessment of the expected environmental benefits;
- .2 **highlighted** the value of early and continued engagement between Contracting Parties and relevant maritime stakeholders, as well as of providing sufficient lead time for the shipping sector and competent authorities to prepare for implementation;
- .3 **noted** with interest the discussion held on the challenges and opportunities for Mediterranean coastal States in adopting and enforcing MARPOL Annex VI and a possible Mediterranean NO_x ECA, notably that the main challenges addressed by the Contracting Parties to the Barcelona Convention included, but were not limited to:
 - .1 the possible legal, technical, and socio-economic impacts of a situation whereby not all Mediterranean coastal States ratified MARPOL Annex VI by the time of the submission to IMO of the proposal for the possible designation of the Med NO_x ECA;
 - .2 the need to ensure fair competition and avoid market distortions, taking also into account the entry into force of the North-East Atlantic ECA;
 - .3 the possible need to align national legislation with MARPOL Annex VI;
 - .4 verification issues and control mechanism actions, including inspections, monitoring of NO_x emissions; and

- .5 the possible lack of stakeholders' preparation for implementing a Med NO_x ECA;
- .4 **encouraged** Contracting Parties to continue with their efforts to ratify, implement, and enforce MARPOL Annex VI in order to reduce air pollution from ships and contribute to global and regional environmental objectives;
- .5 **invited** the Secretariat to continue, subject to availability of funds, supporting Contracting Parties, which so request, through technical assistance, training, and capacity-building activities aimed at enhancing compliance with MARPOL Annex VI and other relevant IMO instruments;
- .6 **recognised** the critical roles and responsibilities of national administrations in enforcing MARPOL Annex VI, including those of flag States and port States, and encouraged Contracting Parties to continue strengthening their national frameworks and institutional capacities in this regard;
- .7 **invited** Contracting Parties to make use of the IMO guidelines and reference materials related to the enforcement of MARPOL Annex VI, and to share experiences and best practices to promote consistent implementation across the region; and
- .8 **encouraged** the Secretariat to continue supporting Contracting Parties in enhancing their understanding and application of the enforcement provisions of MARPOL Annex VI, through training activities, technical cooperation, and the dissemination of relevant information and materials.

AGENDA ITEM 4: IMO ITCP CAPACITY-BUILDING PROGRAMME AND MARPOL ANNEX VI

4.1 Under this agenda item, Ms Györgyi Gurban, representing the IMO, provided an overview of the IMO ITCP capacity-building programmes relevant to MARPOL Annex VI and the implementation of measures addressing air pollution and climate change from international shipping. In particular, details were given on the IMO-European Bank for Reconstruction and Development (EBRD)-World Bank (WB) FIN-SMART Project initiative and how it supports countries in addressing the technical, institutional and financial aspects of the transition towards cleaner shipping.

4.2 Ms Györgyi Gurban also highlighted available capacity-building and technical cooperation opportunities, to support the effective implementation and enforcement of an ECA. The session included a discussion with the representative of the EBRD, Mr James Falzon, on the possible sources of support in terms of funding and financing needs. Participants were invited to identify the main technical, institutional and financial gaps that could affect implementation and enforcement of an ECA.

4.3 A participant sought clarifications on partnership mechanisms available for ports, noting that ports may be managed by private entities or by States. It was recalled that the IMO ITCP capacity-building programmes are intended for developing countries, and that legal entities applying for partnerships, pilot programs, etc. should be national bodies. It was also noted that the IMO capacity-building programmes as presented during this session were supporting the 2023 IMO Strategy for the reduction of greenhouse gases. Finally, Ms Gurban mentioned the

ongoing efforts to enable maritime administrations to have a better understanding and access to existing funds dedicated to climate investment.

4.4 The Meeting took note of the information provided and the comments made.

4.5 Having noted the information provided, the Meeting:

- .1 **noted** with appreciation the objectives of the IMO's technical cooperation climate and clean air thematic programme and recognised its significant contribution to strengthening national and regional capacities for the implementation of IMO instruments, particularly on the IMO climate and clean air capacity building activities and the IMO-EBRD-WB FIN-SMART Project;
- .2 **invited** Contracting Parties to continue engaging actively with the IMO on capacity-building initiatives, and to identify specific areas where technical assistance could further support national efforts; and
- .3 **encouraged** continued cooperation between REMPEC, the IMO, and Contracting Parties in promoting the effective implementation of international conventions aimed at preventing pollution from ships, in line with regional and global objectives.

AGENDA ITEM 5: EXPERIENCE AND LESSONS LEARNED FROM THE DESIGNATION OF OTHER NO_x ECAs

5.1 Under this agenda item, the REMPEC consultant, Ms. Marie Caillerie, introduced her final presentation, focused on practical experience and case studies. First, examples of flag States notification systems were given to illustrate the integration of NO_x Tier III compliance requirements into a regulatory framework. Then the presentation provided an example of fleet renewal by a ferry operator in the Mediterranean region; and an example of a workboat fleet operating in Norway. The presentation also covered Port State Control, with information on sniffers used by some States, and PSC statistics from a classification society. Finally, the consultant shared lessons learned from other NO_x ECAs, based on documents submitted to IMO MEPC and PPR.

5.2 Participants were invited to reflect on their national circumstances, through interactive questions, with a focus on national fleets and industry sectors most likely to be affected by a NO_x ECA. The discussion covered various topics, such as ferry fleets and projected fleet renewal, preparedness of shipyards and marine engine manufacturers established in Mediterranean countries. The specificities of the yachting sector were also discussed.

5.3 The Meeting took note of the information provided and the comments made.

5.4 Having noted the information provided, the Meeting:

- .1 **exchanged** views on the experience and lessons learned from the designation and implementation of existing NO_x ECAs, including with regard to the preparatory process, stakeholder engagement, implementation, compliance and enforcement;
- .2 **noted** that the experience of existing NO_x ECAs provides useful lessons for the development of the Med NO_x ECA, while recognising the specific characteristics and circumstances of the Mediterranean region;

- .3 **acknowledged** that the relevant lessons identified from existing NO_x ECAs, be taken into account in the further refinement of the draft IMO MEPC submission, in particular with regard to implementation, stakeholder engagement, compliance and enforcement; and
- .4 **invited** REMPEC, in coordination with relevant regional and international partners, to continue facilitating the exchange of knowledge and best practices on the implementation of MARPOL Annex VI.

AGENDA ITEM 6: REVIEW OF DRAFT IMO MEPC SUBMISSION ON THE DESIGNATION OF THE MED NO_x ECA UNDER MARPOL ANNEX VI

6.1 As an introduction to this agenda item, the Head of Office of REMPEC briefly recalled the IMO process for the submission of a proposal to MEPC including the expected timelines, in accordance with the draft roadmap, as contained in the Annex to the Final Technical and Feasibility Study. It was recalled that the objective of this agenda item was to agree on any amendments required and to finalise the draft IMO MEPC submission for further consideration by the 17th Meeting of the REMPEC Focal Points, to be tentatively held in May 2027.

6.2 Questions and clarifications were sought on the timelines. Delegations who spoke reiterated that the proposal for the establishment of a Med NO_x ECA should be submitted to MEPC 87 (tentatively scheduled in spring 2028).

6.3 The Meeting undertook a detailed, paragraph-by-paragraph review of the draft IMO MEPC submission as contained in REMPEC/WG.63/6, with reference, as appropriate, to the Report of the NECA TCE (REMPEC/63/INF.3) and the Final Technical and Feasibility Study (REMPEC/63/INF.4).

6.4 During this review, the following aspects were discussed, inter alia:

- .1 procedural aspects regarding the deadline for submission of a large document to MEPC and the maximum number of pages required to allow for translation by IMO services:
 - in accordance with the MEPC method of work (MSC-MEPC.1/Circ.5/Rev.6), bulky documents should be received by IMO 13 weeks before the meeting. Furthermore, documents containing more than 20 pages are not translated in their entirety.
 - The draft MEPC proposal for the designation of a Med NO_x ECA, as available in REMPEC/WG.63/6, has 13 pages of main text, 4 pages of annexes and the full text of the supporting Final Technical and Feasibility Study has 102 pages.
 - Consequently, and to facilitate the documentary process, some participants proposed to aim for a simplified and shorter version of the draft IMO MEPC submission, for example by deleting the Background section.
- .2 available options to submit the supporting Technical and Feasibility Study to MEPC, i.e. as a separate INF. document or as part of the main MEPC submission:
 - Clarification was provided through the IMO Secretariat, on the fact that documents exceeding 20 pages would not be translated in their entirety. Hence, the Technical and Feasibility Study could be summarized in the main submission, and the full text of the Study can be either attached as an annex to the main submission, or alternatively be submitted as a separate Information document (INF). Each option

is acceptable, and in any event, the full text of the Study would not be translated by the IMO Secretariat.

- In that context, the IMO representative Ms Gurban (Projects Implementation) offered to have the Technical and Feasibility Study translated in French for capacity-building activities, and one participant confirmed it would be helpful.
- Participants agreed to have the Technical and Feasibility Study submitted as an INF. document, complementing the main MEPC submission. The draft MEPC submission was amended to delete annexes 1 and 2.

.3 main text changes, as proposed by participants:

- Correcting the wording for reference to the European Commission and for the list of States as sponsors.
- The proposed date of entry into force of the Med NO_x ECA (1 January 2032) was added in the Summary box on the first page.
- The adverb “largely” was reinserted in sentences “The direct benefits of the proposed Med NO_x ECA are expected to largely outweigh additional compliance costs”.
- The wording was improved when referring to diesel engines under the scope of regulation 13 of MARPOL Annex VI.
- The paragraph introducing the scenarios covered in the Technical and Feasibility Study was simplified.

.4 coordinates of the proposed Med NO_x ECA:

- It was recalled that during consultations of the TCE Working group, Egypt proposed to correct the coordinates defining the northern entrance to the Suez Canal to reflect the revised Port Said North area, in accordance with Suez Canal Authority Circular No. 7/2025 (correction of 1 minute of latitude for Point 1 and Point 2 of the area). A participant highlighted that a change in coordinates implied that the proposed new Med NO_x ECA would not be fully identical to the existing Med SO_x ECA, as stated in the draft MEPC submission. REMPEC Head of Office recalled that it had originally been agreed that the two areas should be the same, and this was also included in the COP decision instructing REMPEC to start work on the possible designation.

6.5 In the general discussion during the review, the following comments, inter alia, were made:

- .1 in recognition of the issues related to the impacts and costs for States when designating a NO_x ECA, a delegation suggested to consider a monitoring mechanism, in particular for countries depending on maritime transports and imports. Such a mechanism could cover issues such as freight rates, frequencies of services, port calls, etc. and may help ensure that unintended impacts are identified early and addressed through appropriate technical support. A monitoring mechanism should not only identify potential impacts but also provide the basis for targeted technical, financial or legal support, or other appropriate mitigation measures where significant impacts are demonstrated.
- .2 a delegation noted that it was important to maintain a balanced presentation of the expected environmental benefits of the proposed Med NO_x ECA, alongside its potential economic and implementation challenges, in order to provide a comprehensive and realistic picture of the implications of the designation.

6.6 The revised version REMPEC/WG.63/WP.2 was finalised, as set out in **Annex IV** of this report. The Meeting authorised the Secretariat to proceed with the necessary editorial changes when preparing the final draft text of the MEPC submission. The Meeting requested the Secretariat to prepare the MEPC INF. document containing the Technical and Feasibility Study.

6.7 The Chairperson thanked participants for the constructive debate and concluded with a discussion on the procedural steps required to take the work forward.

6.8 Having noted the information provided, the Meeting:

- .1 **expressed** its appreciation to REMPEC for introducing the background to the draft IMO MEPC Submission, recalling the establishment and role of the MAP NO_x ECA Technical Committee of Experts (NECA TCE), in supporting the drafting process;
- .2 **thanked** REMPEC, as Secretariat, and its consultants, for the work they carried out, in close cooperation with the IMO, and for their respective contributions to the preparation of the draft IMO MEPC submission;
- .3 **reviewed** the progress achieved in the preparation of the draft IMO MEPC submission for the possible designation of the Mediterranean Sea, as a whole, as a Med NO_x ECA, taking into consideration the work undertaken at regional level since the adoption of the relevant decisions of the Contracting Parties to the Barcelona Convention, as well as the detailed Technical and Feasibility Study, including the revised roadmap, developed by the Regional Expert Meeting held in November 2025;
- .4 **considered and reviewed** the draft IMO MEPC submission, paragraph by paragraph, taking into account the comments and observations submitted by Contracting Parties prior to and during the Meeting;
- .5 **acknowledged** the progress made in consolidating the technical, regulatory and policy elements required to support the possible designation of the Med NO_x ECA and recognised the importance of ensuring that the proposal is fully aligned with the applicable requirements and procedures under MARPOL Annex VI;
- .6 **considered** the clarifications provided by the IMO Secretariat and **instructed** the Secretariat to prepare the draft information document containing the details of the Technical and Feasibility Study;
- .7 **agreed** on the amendments and further elements to be incorporated into the draft IMO MEPC submission, as reflected in the revised draft document, contained in the Annex, and requested the Secretariat to further refine the document, as necessary, in accordance with the outcome of the discussions;
- .8 **emphasised** the importance of maintaining a coordinated regional approach throughout the remaining preparatory process, including continued consultation with Contracting Parties and relevant stakeholders, with a view to ensuring regional ownership and broad support for the proposal;
- .9 **acknowledged** that, for the Med NO_x ECA to be effective, it should be implemented and enforced by all Mediterranean coastal States without exception, and that doing so in only parts of the Mediterranean Sea area would compromise the achievement of the projected health and environment benefits as well as would have potential implications, inter alia on competitiveness and encouraged all Contracting Parties that are not yet

Parties, to complete the ratification to MARPOL Annex VI, by the date of the submission of the MED NO_x ECA proposal to the IMO;

- .10 **considered** the next steps towards the possible submission of the draft IMO MEPC submission to IMO, including the institutional arrangements for its submission and the modalities for its presentation and consideration within the relevant IMO bodies;
- .11 **agreed** that the outstanding technical and procedural matters should be addressed through the established regional process and that the finalisation of the proposal should remain guided by the roadmap approved by the Regional Expert Meeting in November 2025;
- .12 **requested** that the outcome of its work, including the revised draft IMO MEPC submission and the proposed way forward, be submitted for consideration by the Seventeenth Meeting of the REMPEC Focal Points, tentatively scheduled for May 2027;
- .13 **requested** that, following consideration by the Seventeenth Meeting of REMPEC Focal Points, the proposal and any related recommendations be transmitted, as appropriate, to the UNEP/MAP Focal Points, to be tentatively held in September 2027, and subsequently to the 25th Meeting of the Contracting Parties to the Barcelona Convention and its Protocols (COP 25), to be tentatively held in December 2027, for consideration and further guidance;
- .14 **instructed** the Secretariat to continue facilitating consultations and coordination among Contracting Parties, IMO and other relevant stakeholders, as appropriate, during the period leading to the Seventeenth Meeting of REMPEC Focal Points, and to support the completion of the technical and procedural elements necessary for the consideration of the proposal; and
- .15 **expressed** its appreciation to the Contracting Parties, experts and stakeholders who contributed to the preparation and review of the draft IMO MEPC submission and to the discussions held during the Meeting and acknowledged the importance of continued regional cooperation in advancing the objectives of reducing nitrogen oxide emissions from international shipping in the Mediterranean Sea.

AGENDA ITEM 7: CONCLUSIONS AND RECOMMENDATIONS

7.1 The Chairperson invited the Rapporteur Ms. Evangelia Pouli to read through the draft conclusions and recommendations of the Meeting, which had been circulated to all participants, as document REMPEC/WG.63/WP.1, for their consideration, review, amendment, and adoption.

7.2 Following interventions by some delegations to express their views on the conclusions and recommendations of the Meeting, and after having entrusted the Secretariat to carry out final editing and any editorial corrections that might be identified, as appropriate, the Meeting adopted the Conclusions and Recommendations of the Meeting, as detailed in **Annex IV** to this report, and further requested the Secretariat to report to the Seventeenth Meeting of the Focal Points of REMPEC on the outcome of the Meeting.

7.3 The IMO's ITCP standard evaluation questionnaire was used at the end of the Meeting to assess the performance of the lecturers and the uptake of information by the participants.

22 participants submitted completed evaluation questionnaires. A summary of the answers to the questionnaires was prepared and is shown in **Annex V** to this report.

CLOSURE OF THE MEETING

8.1 The Chairperson closed the meeting by extending her sincere appreciation to all participants for their active engagement and valuable contributions. The Meeting thanked REMPEC, for their preparation and organisation of this event and all delegations for their active participation, as well as the consultants for the collaborative efforts and the work they carried out.

8.2 The Head of Office of REMPEC expressed his appreciation to the Chairperson, for the smooth running of the proceedings and thanked all REMPEC staff for their work throughout and in preparation of the Meeting. He also thanked the interpreters and technicians for their support.

8.3 The Chairperson closed the Meeting on Thursday, 8 October 2026 at 1745 hours.

ANNEX(E) I
LIST OF PARTICIPANTS / LISTE DES PARTICIPANTS
CONTRACTING PARTIES / PARTIES CONTRACTANTES

ALBANIA / ALBANIE

Ms Ela DUBALI

Specialist, Maritime Sector
Ministry of Infrastructure and Energy

Mr Muharrem TRUPJA

Director Of Maritime (State Authority) Security Directory
Administration & Flag Control
General Maritime Directorate

ALGERIA / ALGERIE

M Abdelhak BOUKHAROUBA

Directeur de la Marine Marchande
Ministère de l'Intérieur et des collectivités locales et des Transports

Mme Amina KESRI

Directrice Générale du Commissariat National du Littoral
Commissariat National du Littoral organisme sous tutelle du
Ministère de l'Environnement et de la Qualité de la Vie

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Mrs Selma ČENGIĆ

Executive Director
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Mr Gordan DOŠEN

Service Leader
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Ms Ivana MAROVIĆ GUGIĆ

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CYPRUS / CHYPRE

Mr Ioannis EFSTRATIOU

Director

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EGYPT / EGYPTE

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Translator & Researcher

Egyptian Maritime Transport & Logistics Sector, Ministry of Transport

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General Manager of Crisis Department

Egyptian Environmental Affairs Agency (EEAA)

EUROPEAN COMMISSION / COMMISSION EUROPÉENNE

Ms Rosa ANTIDORMI

Senior Expert

DG Environment

FRANCE

Mr Guylain THEON

Conseiller développement durable

Ambassade de France

GREECE / GRÈCE

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Marine Environment Protection Directorate

International Co-operation Unit

Hellenic Coast Guard

Mr Dionysios PREVEZANOS

International Cooperation Unit – Head of Unit

Ministry of Maritime Affairs and Insular Policy

Hellenic Coast Guard Headquarters, General Directorate for Shipping

Marine Environment Protection Directorate

ISRAEL / ISRAËL

Ms Danit LEVI NIZRI

Deputy Director

Marine Environment Protection Division

Israel Ministry of Environmental Protection

ITALY / ITALIE

Mrs Cristina FARCHI

Technical Officer

Ministry of Environment and Energy Security

Mr Edoardo RUSSO

Head of Section

Ministry of the Environment and Energy Security

LEBANON / LIBAN

Mr Amer BAYDA

Head of the Shipping Department

Directorate General of Land and Maritime Transport

Mrs Maya EL TAYARA

Head of Maritime Training Division

Ministry of Public Works and Transport

Directorate General of Land and Maritime Transport

LIBYA / LIBYE

Mr Ashraf ALDUWISH

Head of the Emergency Department

Environmental Emergency Management

Ministry of Environment

MALTA / MALTE

Mr Marc' Andrea CASSAR

Senior Officer (Thematic)

Environment & Resources Authority

Mr Justin GALEA

Port Officer Environment

Transport Malta

Ms Evangelia POULI

Assistant Registrar

Merchant Shipping Directorate

Transport Malta

Dr Robert VASSALLO

Senior Manager Legal, EU and International Affairs

Transport Malta

MONACO

Mr Pierre BOUCHET

Pilote

Direction des Affaires Maritimes

MONTENEGRO

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Senior Advisor for the Prevention of Marine Pollution from Ships

Maritime Safety Administration

Mr Duško MRDAK

Senior Advisor I

Environmental Protection Agency of Montenegro

MOROCCO / MAROC

M Hamza BEZIA

Responsable du bureau de la sécurité de la navigation maritime

Direction de la marine marchande

Ministère du transport et de la logistique

Mme Naoual ZOUBAIR

Responsable de la lutte contre la pollution marine

Ministère de la Transition Énergétique et du Développement Durable

SLOVENIA / SLOVÉNIE

Mr Boris LAGANIS

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SPAIN / ESPAGNE

Mr Amable CONCHA GUTIÉRREZ

Maritime Inspector

Spanish Directorate General of Merchant Marine

TUNISIA / TUNISIE

Mr Hatem FEKI

Directeur Général du Transport Maritime et des Ports Maritimes de Commerce

Ministère des Transports

TÜRKIYE

Mr Fatih ŞENOL

Maritime Expert

General Directorate of Maritime

Ministry of Transport and Infrastructure

Mrs Rabia ZAFER

Expert - Environmental Engineer

Ministry of Environment, Urbanization and Climate Change

UNITED NATIONS ORGANIZATIONS / ORGANISATIONS DES NATIONS-UNIES

INTERNATIONAL MARITIME ORGANIZATION (IMO) / ORGANISATION MARITIME INTERNATIONALE (OMI)

Dr Gyorgyi GURBAN

Head, Projects Implementation

UNITED NATIONS ENVIRONMENT PROGRAMME – MEDITERRANEAN ACTION PLAN

Ms Tatjana HEMA

Coordinator

OTHER ORGANISATIONS / AUTRES ORGANISATIONS **OTHER PARTNER / AUTRES PARTENAIRES**

EBRD

Mr James FALZON

Associate Director

CONSULTANTS

Ms Marie CAILLERIE

Mr George MALLOUPPAS

ANNEX II

AGENDA

Opening of the Meeting

1. Adoption of the Agenda
2. Compliance with NOX Tier III standards
3. Other aspects related to regulation 13 and NOX Tier III standards
4. IMO ITCP Capacity-building Programmes and MARPOL Annex VI
5. Experience and lessons learned from the designation of other NOX ECAs
6. Review of draft IMO MEPC submission on the designation of the Med NOX ECA under MARPOL Annex VI
7. Adoption of the conclusions and recommendations

Closure of the Meeting

ANNEX III
LIST OF DOCUMENTS

WORKING DOCUMENTS

REMPEC/WG.63/1	Provisional Agenda
REMPEC/WG.63/1/1	Annotated Provisional Agenda and Draft Timetable
REMPEC/WG.63/6	Draft IMO MEPC submission
REMPEC/WG.63/WP.1	Draft conclusions and recommendations
REMPEC/WG.63/8	Report of Meeting

INFORMATION DOCUMENTS

REMPEC/WG.63/INF.1	List of Documents
REMPEC/WG.63/INF.2	List of participants
REMPEC/WG.63/INF.3	Report of the MAP NO _x ECA Technical Committee of Experts (NECA TCE)
REMPEC/WG.63/INF.4	Final Detailed Technical and Feasibility Study to Assess the Relevant Existing and On-going Studies as well as to Examine the Possible Designation of the Mediterranean Sea, as a whole, as an Emission Control Area for Nitrogen Oxides (Med NO _x ECA) pursuant to MARPOL Annex VI, including Health and Socioeconomic Impacts on the Mediterranean Region and the Individual Contracting Parties to the Barcelona Convention

ANNEX IV

CONCLUSIONS AND RECOMMENDATIONS

The Regional Expert Meeting on the Possible Designation of the Mediterranean, as a whole, as a Nitrogen Oxides Emission Control Area (Med NO_x ECA), pursuant to MARPOL Annex VI, hereinafter referred to as “the Meeting”, which was held in Kalkara, Malta, from 7 to 8 October 2026:

- 1 **expressed appreciation** for the financial support provided by the International Maritime Organization (IMO)’s Technical Cooperation Climate and Clean Air Thematic Programme and the Mediterranean Trust Fund (MTF);
- 2 **welcomed** the work and contributions of all the representatives of the Contracting Parties that participated in the work of the MAP NO_x ECA Technical Committee of Experts (NECA TCE), under the coordination of the Secretariat;
- 3 **thanked** the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), as Secretariat, and its consultants, for the work they carried out, in close cooperation with the IMO, and for their respective contributions to the preparation and successful organisation of the Meeting;
- 4 **appreciated** the various speakers and facilitators who helped in achieving the objectives of the Meeting;
- 5 **took note** of the information provided on the structure and decision-making process of the IMO, as well as the roles and responsibilities of national Administrations in the effective implementation and enforcement of international maritime instruments;
- 6 **acknowledged** the importance of the International Convention for the Prevention of Pollution from Ships (MARPOL Convention) and its Annexes, as the cornerstone of the international regulatory framework to prevent pollution from ships, and encouraged Contracting Parties to ensure their effective implementation and enforcement at national level;
- 7 **highlighted** that international shipping must be regulated at the global level for any control regime to be effective (e.g. to prevent pollution from ships) and to maintain a level playing field for all ships;
- 8 **noted** with appreciation the objectives of the IMO’s technical cooperation climate and clean air thematic programme and recognised its significant contribution to strengthening national and regional capacities for the implementation of IMO instruments, particularly on the IMO climate and clean air capacity building activities and the IMO-European Bank for Reconstruction and Development (EBRD)-World Bank (WB) FIN-SMART Project;
- 9 **invited** Contracting Parties to continue engaging actively with the IMO on capacity-building initiatives, and to identify specific areas where technical assistance could further support national efforts;
- 10 **encouraged** continued cooperation between REMPEC, the IMO, and Contracting Parties in promoting the effective implementation of international conventions aimed at preventing pollution from ships, in line with regional and global objectives;

- 11 **acknowledged** the importance of MARPOL Annex VI as a key instrument in addressing air emissions from ships, including the control of sulphur oxides (SO_x) and nitrogen oxides (NO_x), and recognised its relevance to improving air quality and protecting human health and the environment;
- 12 **took note** of the presentation on the updated Study on Trends and Outlook – Air Pollution Scenario and exchanged views on the projected trends in emissions from shipping and their implications for air quality in the Mediterranean region;
- 13 **noted** the relevance of the findings of the updated Study on Trends and Outlook, to the ongoing consideration of the possible designation of the Mediterranean Sea, as a whole, as a NO_x ECA and recommended that the relevant findings and projections are in line with the Technical and Feasibility Study and will be taken into account, as appropriate, ;
- 14 **welcomed** the detailed explanation of the provisions under MARPOL Annex VI, particularly those related to equivalents, notifications, surveys, and certification, as well as the key technical requirements of the NO_x Technical Code, concerning marine diesel engines and compliance with emission standards;
- 15 **noted** the detailed explanation of the provisions under MARPOL Annex VI, particularly those related to effective harmonized implementation and enforcement, concerning the NO_x Technical Code ;
- 16 **recognised** the importance of a robust technical and regulatory basis for the designation of a NO_x ECA, supported by appropriate emissions, shipping activity and air-quality information and an assessment of the expected environmental benefits;
- 17 **highlighted** the value of early and continued engagement between Contracting Parties and relevant maritime stakeholders, as well as of providing sufficient lead time for the shipping sector and competent authorities to prepare for implementation;
- 18 **exchanged** views on the experience and lessons learned from the designation and implementation of existing NO_x ECAs, including with regard to the preparatory process, stakeholder engagement, implementation, compliance and enforcement;
- 19 **noted** that the experience of existing NO_x ECAs provides useful lessons for the development of the Med NO_x ECA, while recognising the specific characteristics and circumstances of the Mediterranean region;
- 20 **acknowledged** that the relevant lessons identified from existing NO_x ECAs, be taken into account in the further refinement of the draft IMO MEPC submission, in particular with regard to implementation, stakeholder engagement, compliance and enforcement;
- 21 **noted with interest** the discussion held on the challenges and opportunities for Mediterranean coastal States in adopting and enforcing MARPOL Annex VI and a possible Mediterranean NO_x ECA, notably that the main challenges addressed by the Contracting Parties to the Barcelona Convention included, but were not limited to:
 - .1 the possible legal, technical, and socio-economic impacts of a situation whereby not all Mediterranean coastal States ratified MARPOL Annex VI by the time of the submission to IMO of the proposal for the possible designation of the Med NO_x ECA;

- .2 the need to ensure fair competition, taking also into account the entry into force of the North-East Atlantic ECA;
 - .3 the possible need to align national legislation with MARPOL Annex VI;
 - .4 verification issues and control mechanism actions, including inspections, monitoring of nitrogen oxides (NO_x) emissions; and
 - .5 the possible lack of stakeholders' preparation for implementing a Med NO_x ECA;
- 22 **encouraged** all Contracting Parties to continue with their efforts to ratify, implement, and enforce effectively MARPOL Annex VI in order to reduce air pollution from ships and contribute to global and regional environmental objectives;
- 23 **invited** the Secretariat to continue, subject to availability of funds, supporting Contracting Parties, which so request, through technical assistance, training, and capacity-building activities aimed at enhancing compliance with MARPOL Annex VI and other relevant IMO instruments;
- 24 **recognised** the critical roles and responsibilities of national administrations in enforcing MARPOL Annex VI, including those of flag States and port States, and encouraged Contracting Parties to continue strengthening their national frameworks and institutional capacities in this regard;
- 25 **invited** Contracting Parties to make use of the IMO guidelines and reference materials related to the enforcement of MARPOL Annex VI, and to share experiences and best practices to promote consistent implementation across the region;
- 26 **encouraged** the Secretariat to continue supporting Contracting Parties in enhancing their understanding and application of the enforcement provisions of MARPOL Annex VI, through training activities, technical cooperation, and the dissemination of relevant information and materials;
- 27 **invited** REMPEC, in coordination with relevant regional and international partners, to continue facilitating the exchange of knowledge and best practices on the implementation of MARPOL Annex VI;
- 28 **expressed its appreciation** to REMPEC for introducing the background to the draft IMO MEPC Submission, recalling the establishment and role of the MAP NO_x ECA Technical Committee of Experts (NECA TCE), in supporting the drafting process;
- 29 **thanked** REMPEC, as Secretariat, and its consultants, for the work they carried out, in close cooperation with the IMO, and for their respective contributions to the preparation of the draft IMO MEPC Submission;
- 30 **reviewed** the progress achieved in the preparation of the draft submissions to IMO MEPC 87 for the possible designation of the Mediterranean Sea, as a whole, as a Med NO_x ECA, taking into consideration the work undertaken at regional level since the adoption of the relevant decisions of the Contracting Parties to the Barcelona Convention, as well as the detailed Technical and Feasibility Study, including the revised roadmap, developed by the Regional Expert Meeting held in November 2025;
- 31 **considered and reviewed** the draft IMO MEPC submission, paragraph by paragraph, taking into account the comments and observations submitted by Contracting Parties prior to and during the Meeting;

- 32 **acknowledged** the progress made in consolidating the technical, regulatory and policy elements required to support the possible designation of the Med NO_x ECA and recognised the importance of ensuring that the proposal is fully aligned with the applicable requirements and procedures under MARPOL Annex VI;
- 33 **considered** the clarifications provided by the IMO Secretariat and **instructed** the Secretariat to prepare the draft information document containing the details of the Technical and Feasibility Study;
- 34 **agreed** on the amendments and further elements to be incorporated into the draft IMO MEPC submission, as reflected in the revised draft IMO MEPC submission, contained in the Annex, and requested the Secretariat to further refine the document, as necessary, in accordance with the outcome of the discussions;
- 35 **emphasised** the importance of maintaining a coordinated regional approach throughout the remaining preparatory process, including continued consultation with Contracting Parties and relevant stakeholders, with a view to ensuring regional ownership and broad support for the proposal;
- 36 **acknowledged** that, for the Med NO_x ECA to be effective, it should be implemented and enforced by all Mediterranean coastal States without exception, and that doing so in only parts of the Mediterranean Sea area would compromise the achievement of the projected health and environment benefits as well as would have potential implications, *inter alia* on competitiveness and encouraged all Contracting Parties that are not yet Parties, to complete the ratification to MARPOL Annex VI, by the date of the submission of the MED NO_x ECA proposal to the IMO;
- 37 **considered** the next steps towards the possible submission of the draft IMO MEPC submission to IMO, including the institutional arrangements for its submission and the modalities for its presentation and consideration within the relevant IMO bodies;
- 38 **agreed** that the outstanding technical and procedural matters should be addressed through the established regional process and that the finalisation of the proposal should remain guided by the roadmap approved by the Regional Expert Meeting in November 2025;
- 39 **requested** that the outcome of its work, including the revised draft IMO MEPC submission and the proposed way forward, be submitted for consideration by the Seventeenth Meeting of the REMPEC Focal Points, tentatively scheduled for May 2027;
- 40 **further requested** that, following consideration by the Seventeenth Meeting of REMPEC Focal Points, the proposal and any related recommendations be transmitted, as appropriate, to the UNEP/MAP Focal Points, to be tentatively held in September 2027, and subsequently to the 25th Meeting of the Contracting Parties to the Barcelona Convention and its Protocols (COP 25), to be tentatively held in December 2027, for consideration and further guidance;
- 41 **instructed** the Secretariat to continue facilitating consultations and coordination among Contracting Parties, IMO and other relevant stakeholders, as appropriate, during the period leading to the Seventeenth Meeting of REMPEC Focal Points, and to support the completion of the technical and procedural elements necessary for the consideration of the proposal; and

- 42 **expressed** its appreciation to the Contracting Parties, experts and stakeholders who contributed to the preparation and review of the draft IMO MEPC submissions and to the discussions held during the Meeting and acknowledged the importance of continued regional cooperation in advancing the objectives of reducing nitrogen oxides emissions from international shipping in the Mediterranean Sea.

ANNEX



INTERNATIONAL
MARITIME
ORGANIZATION

E

MARINE ENVIRONMENT PROTECTION
COMMITTEE
[...] session
Agenda item [x]

MEPC[87]
[Day] [Month] 202[8]
Original: ENGLISH
Pre-session public release: ☒

IDENTIFICATION AND PROTECTION OF SPECIAL AREAS, ECAs AND PSSAs

Proposal to designate the Mediterranean Sea, as a whole, as an Emission Control Area for Nitrogen Oxides

Submitted by 21 Parties to the Barcelona Convention]

SUMMARY

Executive summary: This document contains a proposal to designate the Mediterranean Sea, as a whole, as an Emission Control Area for nitrogen oxides, pursuant to MARPOL Annex VI and with [1/1/2032] as the date of entry into force. It contains the proposed draft amendments to MARPOL Annex VI.

Strategic direction, if applicable: TBC

Output: TBC

Action to be taken: Paragraph

Related documents: TBC

Introduction

1 The Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (the "Barcelona Convention"), at their [...] meeting, agreed to submit a proposal for the designation of the Mediterranean Sea, as a whole, as an Emission Control Area to prevent, reduce and control emissions of nitrogen oxides (NO_x) from ships, pursuant to regulation 13 and Appendix III to MARPOL Annex VI (herein referred to as the proposed "Med NO_x ECA").

2 The 21 riparian States of the Mediterranean] set forth the proposal for the designation of the Med NO_x ECA. The European Commission, as Contracting Party to the Barcelona Convention representing the European Union therein, associates itself with this proposal.

3 The Mediterranean Sea is one of the world's busiest maritime corridors, characterised by high vessel density, diverse ship types and intense international traffic. Emissions from ships contribute largely to air pollution and nitrogen deposition, with

cascading impacts on ecosystems, public health and coastal economies. Mediterranean coastal areas experience elevated concentrations of NO_x emissions, particularly in countries with dense coastal populations and major port infrastructures.

4 Taking into consideration the various challenges and diverse capacity building within the Mediterranean region, the proponents agreed that the entry into force of the Med NO_x ECA should be set to [1 January 2032].

Summary of the proposal

5 It is proposed to designate a Mediterranean Sea NO_x ECA complementing the existing SO_x ECA. Addressing NO_x emissions alongside SO_x and PM broadens the scope of air pollutant controls from maritime sources and would deliver enhanced environmental and public health benefits.

6 Total NO_x emissions in Mediterranean countries remain among the highest in Europe, particularly in countries with dense coastal populations and major port infrastructure. In the Mediterranean region, ship-sourced NO_x emissions are believed to represent around 10–20% of total NO_x emissions, a proportion higher than in many other enclosed seas¹.

7 The direct benefits of the proposed Med NO_x ECA are expected to largely outweigh additional compliance costs. Such costs are not expected to lead to significant indirect impacts on citizens and wider economies, even in countries heavily dependent on maritime imports. The burden on international shipping is expected to be small compared to the improvements in air quality, the reductions in premature mortality and health incidences associated with this air pollution.

8 It is recalled that, in practice, a NO_x ECA introduces Tier III emission limits for marine diesel engines above 130 kW output power, other than those used solely for emergency purposes installed on new ships (or in cases of major conversion, irrespective of tonnage). The adoption of the North-East Atlantic Ocean as an ECA for SO_x, PM and NO_x (entry into force 2028), along with the other existing or planned ECAs for NO_x, already mandates Tier III compliance for a large proportion of new built ships that will be sailing through the Mediterranean Sea.

9 The Study contained in [MEPC/XX/INF.] provides a comprehensive assessment of environmental, economic and social impacts of the proposed NO_x ECA, along with an analysis of the cost-effectiveness. Data, illustrations, or analysis in the main part of this submission are all extracted from the Study, unless specified otherwise. The Study specifically answers the eight criteria for the designation of an ECA, set out in Appendix III of MARPOL Annex VI, as shown in the table below.

Ref.	Criteria	Section of the Study
3.1.1	a clear delineation of the proposed area of application, along with a reference chart on which the area is marked;	3.1
3.1.2	the type or types of emission(s) that is or are being proposed for control (i.e. NO _x or SO _x and particulate matter or all three types of emissions)	3.3

¹ MEPC/INF.XX, "Towards a Mediterranean NECA: Contextual Foundations and Sectoral Implications for Fisheries and Tourism", Paper 2, Plan Bleu.

Ref.	Criteria	Section of the Study
3.1.3	a description of the human populations and environmental areas at risk from the impacts of ship emissions;	3.4
3.1.4	an assessment that emissions from ships operating in the proposed area of application are contributing to ambient concentrations of air pollution or to adverse environmental impacts. Such assessment shall include a description of the impacts of the relevant emissions on human health and the environment, such as adverse impacts on terrestrial and aquatic ecosystems, areas of natural productivity, critical habitats, water quality, human health, and areas of cultural and scientific significance, if applicable. The sources of relevant data including methodologies used shall be identified;	Emissions from ships: 4.4 Air quality impacts: 5.1.3
3.1.5	relevant information, pertaining to the meteorological conditions in the proposed area of application, to the human populations and environmental areas at risk, in particular prevailing wind patterns, or to topographical, geological, oceanographic, morphological or other conditions that contribute to ambient concentrations of air pollution or adverse environmental impacts;	3.5
3.1.6	the nature of the ship traffic in the proposed emission control area, including the patterns and density of such traffic;	4.2
3.1.7	a description of the control measures taken by the proposing Party or Parties addressing land-based sources of NO _x , SO _x and particulate matter emissions affecting the human populations and environmental areas at risk that are in place and operating concurrently with the consideration of measures to be adopted in relation to provisions of regulations 13 and 14 of Annex VI;	5.3
3.1.8	the relative costs of reducing emissions from ships when compared with land-based controls, and the economic impacts on shipping engaged in international trade.	7

Table 1 – Cross references to criteria for an ECA designation under MARPOL Annex VI

10 This submission comprises two annexes:

1. **Annex 1:** a description and a chart of the proposed area; and
2. **Annex 2:** proposed draft amendments to regulation 13.5 and 13.6 and Appendix VII of MARPOL Annex VI

Description of the proposed area and emissions proposed for control

11 The area proposed to be designated as a NO_x ECA is the current Mediterranean Sea SO_x ECA, as referred in regulation 14.3.5 and defined in paragraph .4 of appendix VII to MARPOL Annex VI. The geographical area is illustrated in figure 2 below and described in detail in annex 1.



Figure 2 – Area covered by proposed Med NO_x ECA in annex 1

12 It is recalled that NO_x comprise primarily nitric oxide NO and nitrogen dioxide NO₂. NO_x under the scope of regulation 13 in MARPOL Annex VI are produced by the combustion of fossil fuels in diesel engines used for propulsion or auxiliary purposes onboard ships.

Populations and environment at risk from exposure to ship emissions

13 The Mediterranean region is home to significant coastal populations, and is renowned for its rich cultural heritage and diverse ecosystems. Coastal hotspots such as the Adriatic Sea, the Strait of Gibraltar and the Eastern Mediterranean are particularly affected by NO_x due to intense shipping activity. While total NO_x emissions across sectors have slightly declined over the past decade, Mediterranean coastal areas continue to experience elevated concentrations, especially during peak tourism and shipping seasons².

Coastal populations

14 In 2018, the Mediterranean coastal States were home to approximately 512 million people, of which nearly 30% resided in coastal areas. This population was projected to reach 529 million in 2025, as illustrated in figure 3.

15 Atmospheric transport mechanisms enable pollutants to travel considerable distances inland, thereby affecting air quality well beyond the immediate vicinity of ports and shipping routes. As a result, both coastal and inland populations are exposed to elevated levels of air pollution.

² Annex 2, “Towards a Mediterranean NECA: Contextual Foundations and Sectoral Implications for Fisheries and Tourism”, Paper 2, Plan Bleu.

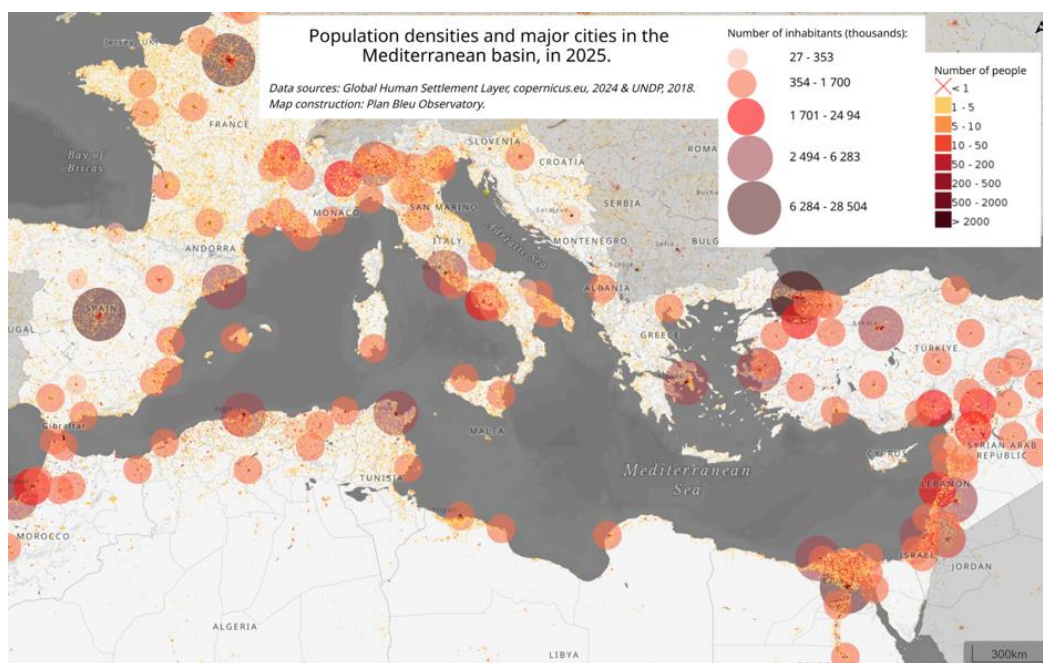


Figure 3 - Population density in the Mediterranean region (as in the Study)

Port areas

16 Mediterranean coastal regions are densely populated areas where numerous ports and vulnerable communities are located. In 2008, there were 480 ports and terminals in the Mediterranean area. Port or maritime workers and surrounding populations are disproportionately impacted by air pollution, as frequently exposed to harmful levels of air pollutions from shipping activities.

Environmental areas at risk

17 The Mediterranean region is home to a very large number of culturally and environmentally significant sites. These include UNESCO World Heritage sites, archaeological or historical landmarks, and ecologically sensitive marine and coastal ecosystems.

18 Such areas are particularly susceptible to NO_x , which contribute to the formation of ground-level ozone and secondary particulate matter.

19 NO_x emissions also contribute to environmental degradation through processes such as soil acidification and eutrophication, which have detrimental effects on biodiversity.

Meteorological conditions

20 Meteorological conditions in the Mediterranean region are characterised by prevailing onshore winds, which are key drivers to the dispersion of NO_x emissions from shipping, carrying pollutants over land and potentially hundreds of kilometres inland.

21 It is estimated that approximately 70% of shipping emissions occur within 400 km of the coasts. NO_x emissions, along with their secondary pollutants, can remain airborne for five to ten days before being removed from the atmosphere through deposition or chemical transformation. During this period, prevailing winds facilitate the movement of these pollutants across both water and land, adversely affecting large portions of Mediterranean coastal States.

Ship traffic in the Mediterranean Sea

Traffic patterns

22 The main traffic flows in the Mediterranean can be categorized as such:

1. **transiting traffic:** Asia-Europe route (through the Suez Canal and Strait of Gibraltar); Trans-Atlantic route (connecting with North America via the Strait of Gibraltar); and traffic bound for the Black Sea (via the Bosphorus Strait);
2. **intra-Mediterranean traffic:** represented 58% of the total Mediterranean traffic in 2016. Includes short-sea shipping and ferry connections.
3. **cruising itineraries:** The Mediterranean Sea is the second biggest cruising region in the world.
4. **ships on domestic routes:** fleet operating exclusively within flag State jurisdictions, such as ferries or ro-ro vessels providing inter-islands connections.

23 Intra-Mediterranean traffic involves ships that are not directly affected by other NO_x ECAs. Transiting traffic includes ships that may be built as Tier III compliant due to their operational patterns covering other NO_x ECA.

Description of the fleet

24 The main characteristics of the fleet analysed in the Study, for reference year 2023, are summarized as follows:

- Around 24,000 unique ships (fitted with individual marine diesel engines of power more than 130 kW) operated in the Mediterranean Sea in 2023.
- 16% of those ships operated exclusively within waters of their flag State.
- Amongst the total fleet operating in the Mediterranean Sea, 8% of ships were fitted with engines certified to Tier III, 20% with engines certified as Tier II and 37% as Tier I.

25 Figure 4 shows the number of ships by Tiers and types for year 2023. The fleet is dominated by bulk carriers and general cargo ships. Some categories, notably general cargo ships, have a higher share of older ships (e.g. Tier 0 and Tier I).

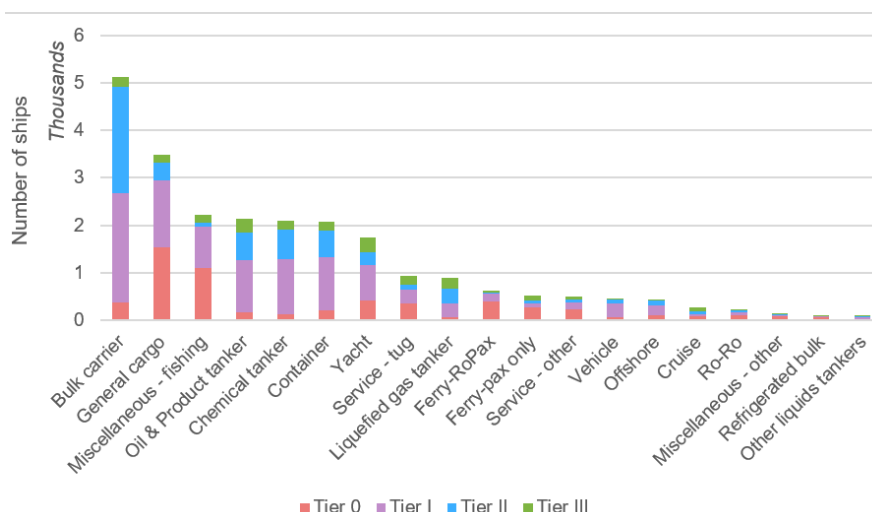


Figure 4 – Ships operating in the Mediterranean Sea in 2023 by Tier and type

Contributions from ships to adverse impacts and benefits gained from a NO_x ECA

Different scenarios assessed in the Study

26 The Study provides estimations and assessments for **two decarbonisation pathways**, reflecting possible variations in the future share of marine fuel types, resulting from the outcome of the consideration of IMO mid-term GHG reduction measures:

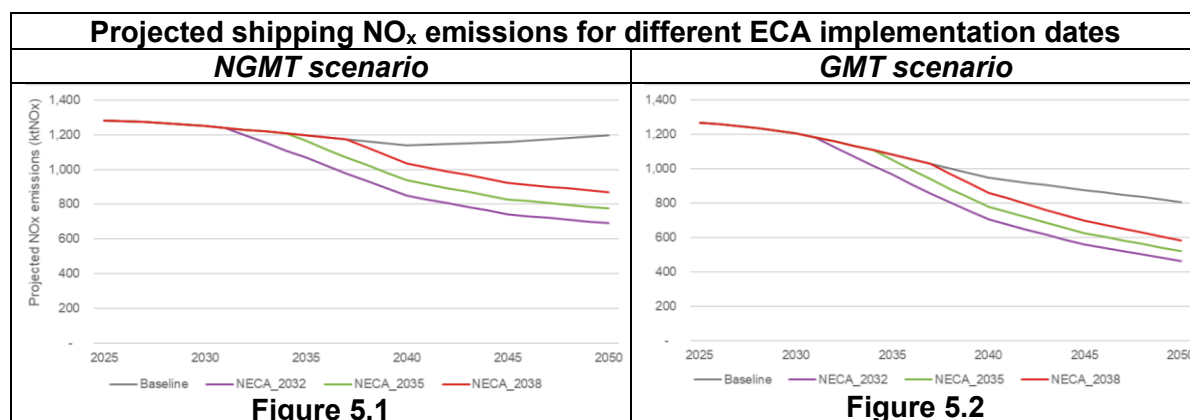
- *no global mid-term measures (NGMT)*: a business-as-usual scenario based on 2023 reference year (for example, in 2050 the share of HFO is set to 15% and 0% for biomethanol).
- *global mid-term measures (GMT)*: based on Scenario 50 analysed in the IMO Comprehensive Impact Assessment of the basket of candidate GHG reduction mid-term measures in MEPC 82/INF.8/Add.1 (for example, in 2050 the share of HFO is set to 5% and 10% for biomethanol).

Estimation of NO_x emissions from shipping

27 According to the Study modelling analysis:

- in 2023, **1,415 kilotonnes of NO_x** were emitted within the Mediterranean Sea by ships subject to NO_x regulations (modelled real world emission factors based on sniffer measurements).
- Containerships are the top emitters with around 30% of total NO_x emissions, followed by bulk carriers (14%) and oil & product tankers (13%).

28 The projected shipping emissions were calculated for the different scenarios covered in the Study, as illustrated below:



29 As shown on figure 5.2, in the “global mid-term measures” scenario, NO_x emissions from shipping would be reduced from approximately 70% by 2050 (decreasing from 1,300 kt in 2025 to 450 kt by 2050).

30 The proposal for the Mediterranean SO_x ECA, submitted in 2022 in MEPC 78/11, contained a technical feasibility study which had estimated that a NO_x ECA would reduce NO_x by 38% (2015/16 baseline) when half of the ships would be Tier III and by 77% when all ships would be Tier III.

Impacts of NO_x on human health and benefits gained from an ECA

31 The inhalation of air pollutants leads to a higher risk of respiratory and cardiovascular diseases (e.g., bronchitis, asthma, lung cancer). These impacts on health lead to medical treatment costs, production loss at work (due to illness) and, in some cases, death.

32 The health benefits were estimated for the period 2031 to 2050, based on 13 different health diseases. The result table is shown below.

Health impact	Unit	NECA EIF 2032	
		NGMT	GMT
Chronic Mortality (30yr +) deaths	Total life years lost	-156,978	-119,040
Infant Mortality (1 month-1yr)	Total life years lost	-1,266	-960
Chronic Bronchitis (18yr +)	Change in cases	-30,537	-23,157
Bronchitis in children aged 6 to 12	Change in cases	-9,040	-6,855
Stroke	Change in cases	-2,094	-1,588
Myocardial infarction	Change in cases	-1,397	-1,060
Diabetes Mellitus Type 2	Change in cases	-284	-215
Lung Cancer	Change in cases	-531	-402
Asthma symptom days (children 5-19yr)	Change in cases	-6,047	-4,585
Cardiovascular hospital admissions	Change in hospital admissions	-2,480	-1,881
Respiratory Hospital Admissions (All ages)	Change in hospital admissions	-2,575	-1,953
Minor Restricted Activity Days (MRADs all ages)	Number of restricted activity days	-5,997	-4,548
Workday Lost	Number of workdays lost	-1,913	-1,451

Table 2 – Health benefits over 2031-2050 for the NGMT and GMT scenarios

33 The Study shows that a Med NO_x ECA provides benefits for all 13 health diseases, with chronic bronchitis (18yr +) benefiting the most.

Impacts of NO_x on biodiversity

34 The Mediterranean Sea is a sensitive ecosystem with high marine biodiversity (17,000 listed marine species). It continues to experience environmental degradation driven by anthropogenic factors, including acidification, pollution and loss of marine habitat (e.g. seagrass meadows and coral reefs).

35 NO_x have a significant impact on biodiversity, particularly within sensitive ecosystems. Atmospheric deposition of NO_x is one of the major sources of nitrogen and phosphorus in some regions of the Mediterranean Sea. Potential impacts on the biodiversity include nutrient loading (increased growth of certain algal species, which may produce harmful toxins) and acidification or eutrophication in both terrestrial and aquatic ecosystems (impacts on species composition, habitat quality and overall ecosystem resilience).

36 The potential contribution from ships on total NO₂ concentration, including nitrogen deposition, is high on the main shipping routes and in coastal regions, ranging from 25% to 85% of the total NO₂ concentration. Values are high (over 300mg) in cities and densely populated regions, with the highest impact of NO₂ concentration found near major ports.

Impacts of NO_x on areas of cultural significance

37 There are 49 cultural UNESCO World Heritage Sites located in coastal areas of the Mediterranean.

38 NO_x emitted by ships contribute to the corrosion and soiling of cultural heritage sites, accelerating the deterioration of historic buildings and monuments. Substantial evidence shows their role in the corrosion of calcareous stone, such as limestone, and in surface discolouration. As explained above, NO_x originating from sources located far away, such as ships at sea or in port, travel inland and can potentially affect cultural heritage sites.

Total air quality benefits of a Med NO_x ECA

39 In summary, a Mediterranean NO_x ECA brings air quality benefits, as a combined reduction of all the adverse impacts described above. The Study estimates the cumulative air quality benefits such as the introduction of a NO_x ECA is expected to result **in cumulative air quality benefits just under €15 billion** (for implementation year 2032 and GMT decarbonisation scenario) in the period 2031-2050 (or € 19 billion with the NGMT scenario).

Land-based emissions controls

40 The most significant land-based contributors to NO_x emissions in Mediterranean coastal states are road transport; public power; industry; and other stationary combustion (based on 2022 data and projections for 2030).

41 The limited availability and comparability of cost data created challenges to determine cost effectiveness ratios of land-based measures for countries bordering the Mediterranean. Based on further review of various data sources, a range of €900-6,500 per tonne of NO_x reduced was considered as the most suitable proxy for the cost of land-based emissions controls.

Economic impacts of a Med NO_x ECA

Fleet-wide compliance costs

42 The costs assessed relate to the direct compliance costs placed on fleet operators (and potentially passed on to end-consumers) through increased investment for ship replacements and energy demand of technologies or methods required to meet Tier III emission limits. It is recalled that CAPEX increase as Tier III compliant technologies and engines are required for newbuild ships or when engines are transformed/modified. In that context, the replacement rates for each ship type across the fleet is an important factor. The increase in OPEX, or operational costs, will vary based on the Tier III technology installed.

43 The fleet-wide compliance costs for shipping in Mediterranean Sea is estimated to a total of €1,624 million cumulated over the period 2035-2050. The projected impact of a NO_x ECA on total costs is expected to be modest for fleet operators, as the cumulative cost increase from the baseline scenario remains under 0.2%.

Shipping costs

44 On average, shipping freight rates are not expected to increase beyond 0.3%. Impacts on cruise ticket prices are expected to be negligible.

45 The Study provides two *Case studies* focused on short sea shipping connections, showing variations in ticket prices (passenger or truck with driver tickets). While the increase remains under 5% for the period 2035-2040, it could reach 14% in the long term (2041-2050), due to a later replacement of the existing fleet with Tier III compliant ships, occurring by or after 2040.

46 The proposed NO_x ECA will have a limited cost impact in the near-term (2040) on short sea (ro-ro, ro-pax and passenger ships) shipping costs in the Mediterranean, given lower replacement rates for ferries, but increasing gradually as Tier III compliance reaches 100% of the Mediterranean fleet. Therefore, the NO_x ECA could generate additional cost for operators of ferries and/or routes in the Mediterranean area. Connectivity impacts could be more significant in non-EU countries, unless specific public service obligation (fixing the maximum price) contracts were established to protect essential services.

Other impacts of a Med NO_x ECA

47 An overview of other economic impacts is provided in the table below. Overall, the Study concludes that the economic impacts would remain relatively modest.

Impacts on	Description and Key findings
Consumer prices	Marginal impact on goods' prices. Maximum price increases estimated at 0.03% Price increases are higher in small island countries like Malta or Cyprus, particularly for fuels and consumer goods (however, modelled price increases in these countries are still marginal.)
Macroeconomy	Marginal impacts on GDP and employment levels, given small changes in transport costs
Modal shift	No evidence to suggest that a significant mode shift would occur, noting however a higher cost impact on short sea shipping.

Re-routing risks

The very limited increase in costs (< 0.3% on total shipping costs) is not expected to provide a financial incentive for re-routing.

Table 3 – Summary of other economic impacts assessed in the Study

Cost-effectiveness of a Med NO_x ECA

48 The cost-effectiveness analysis is informed by the various data described above and consists in comparing the benefits obtained with the costs incurred. It is supported by three indicators, as such:

1. *Net Present Value* (difference between total discounted benefits and costs):
 - i. the NPV from a NO_x ECA is positive across all scenarios considered;
 - ii. benefits outweigh costs for all fuel/technology mix sensitivities.
2. *Benefit-cost ratio* (total benefits vs implementation costs, up to 2050).
 - i. with a BCR estimated around 9 (i.e. benefits 9 times greater than the costs), the NO_x ECA is considered highly cost-effective.
3. *NO_x abatement cost* (compliance cost per tonne of NO_x reduced):
 - i. around €530 per tonne of NO_x reduced;
 - ii. the Med NO_x ECA abatement cost is at the lower end of the cost ranges provided in previous NO_x ECA feasibility studies.

49 The results demonstrate the strong cost-effectiveness of the proposed Med NO_x ECA compared to both land-based measures and previously implemented ECAs.

Lessons learned during the implementation of the SO_x ECA and measures to support implementation of the NO_x ECA

50 During the consultation process, leading to the submission of this proposal, Contracting Parties to the Barcelona Convention [co-sponsors] shared their feedback on the implementation of the SO_x ECA and their comments on the challenges for Mediterranean coastal States to adopt and implement the Med NO_x ECA. In particular, the need for technical assistance and capacity building was reinstated, while acknowledging initiatives already taken. Contracting Parties were invited to continue engaging actively for the promotion of technical co-operation, capacity-building initiatives, technology transfer, and the need for financial support was raised, taking into account the different levels of readiness among Mediterranean coastal States. In that context, REMPEC was invited to continue, subject to availability of funds, supporting Contracting Parties which so request, through technical assistance, training, and capacity-building activities aimed at enhancing compliance with MARPOL Annex VI.

Proposed amendments

51 Annex 2 contains the proposed draft amendments to regulation 13 and appendix VII of MARPOL Annex VI, to designate the Mediterranean Sea, as a whole, as an Emission Control Area for nitrogen oxides.

52 The “three-dates system” is used for the application criteria, as already applied for the introduction of the Norwegian ECA (MEPC 81/11/1) and the North Atlantic ECA (MEPC 83/12). The wording follows the recommendation in the IMO *Guidance on drafting of amendments to the 1974 SOLAS Convention and related mandatory instruments* (MSC.1/Circ.1500/Rev.3). This approach could prevent an increase in keel-laying activity prior to entry-into-force of a Med NO_x ECA in an effort to circumvent emission requirements,

as seen in the implementation of other NO_x ECAs in the past.

Conclusion

53 The designation of the proposed Mediterranean Sea NO_x ECA will significantly reduce ship emissions, improve air quality, thereby contributing to public health and environmental protection in the Mediterranean region, as demonstrated in the Study contained in document MEPCXX/INF.X

54 The strong cost-effectiveness of the proposed Mediterranean Sea NO_x ECA compared to both land-based measures and previously implemented NO_x ECAs is demonstrated. Overall, the direct benefits of the proposed Med NO_x ECA is expected to largely outweigh additional compliance costs. Furthermore, a large proportion of ships sailing across the proposed NO_x ECA will already be impacted by other ECA's, hence reducing the impact on international shipping sectors.

Action requested of the Committee

55 The Committee is invited to:

1. consider the information contained in this document and in document MEPCXX/INF.X;
2. approve the proposed draft amendments to MARPOL Annex VI for the designation of the Mediterranean Sea, as a whole, as an Emission Control Area for Nitrogen Oxides, set out in Annex 2, with a view to adoption at MEPC [...]; and
3. take action as appropriate

ANNEX 1**Description and chart of the proposed Mediterranean NO_x ECA**

The area of application is strictly identical to the current Mediterranean Sea Emission Control Area for Sulphur Oxides and Particulate Matter, defined in paragraph 4 of appendix VII to MARPOL Annex VI, and reproduced below for ease of reference:

“4 In respect of the application of regulation 14.4, the Mediterranean Sea Emission Control Area for Sulphur Oxides and Particulate Matter includes all waters bounded by the coasts of Europe, Africa and Asia, and is described by the following coordinates:

- .1 the western entrance to the Straits of Gibraltar, defined as a line joining the extremities of Cape Trafalgar, Spain (36°11'.00 N, 6°02'.00 W) and Cape Spartel, Morocco (35°48'.00 N, 5°55'.00 W);
- .2 the Strait of Canakkale, defined as a line joining Mehmetcik Burnu (40°03'N, 26°11'E) and Kumkale Burnu (40°01'.00 N, 26°12'.00 E); and
- .3 the northern entrance to the Suez Canal excluding the area enclosed by geodesic lines connecting points 1-4 with the following coordinates:

Point	Latitude	Longitude
1	31°29'.00 N	32°16'.00 E
2	31°29'.00 N	32°28'.48 E
3	31°14'.00 N	32°32'.37 E
4	31°14'.00 N	32°16'.00 E

Chart of the proposed Mediterranean NO_x ECA

Being identical to the current Med SO_x ECA, the same definition, as set out in annex 3 of MEP 78/11, applies:

“The area of application of the proposed Med NO_x ECA includes waters internal to the Mediterranean Sea, as defined by the International Hydrographic Organization and shown in the chart below. The area shall take into account points defined in .1, .2 and .3 above.”



ANNEX 2

Proposed draft amendments to regulation 13 and appendix VII of MARPOL Annex VI

(new text is shown as underlined and text to be deleted as ~~strikethrough~~).

Regulation 13

Nitrogen oxides (NO_x)

Tier III

At the end of paragraph 13.5.1.2, add a new sub-paragraph 4, as follows:

“4 [1 January 2032] and is operating in the Mediterranean Sea Emission Control Area. For the Mediterranean Sea Emission Control Area, "ship constructed on or after 1 January 2032" means a ship:

.1 for which the building contract is placed on or after 1 January 2032; or

.2 in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction on or after 1 July 2032; or

.3 the delivery of which is on or after 1 January 2036.”

Emission control area

At the end of paragraph 13.6, a new sub-paragraph⁸ is added as follows:

“.8 the Mediterranean Sea Emission Control Area, which means the area described by the coordinates provided in appendix VII to this Annex.”

Appendix VII

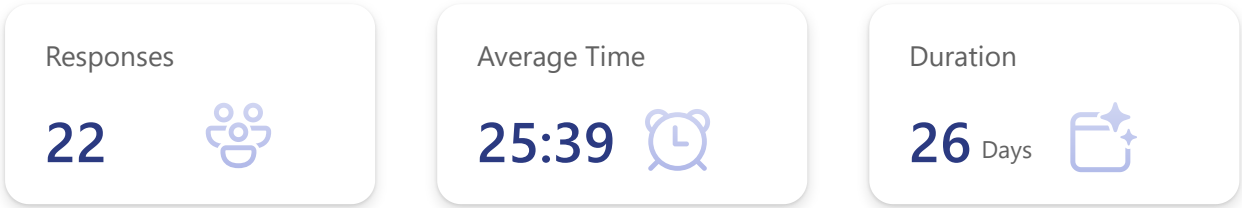
Emission control areas (regulations 13.6 and 14.3)

Amend the existing paragraph 4 as follows:

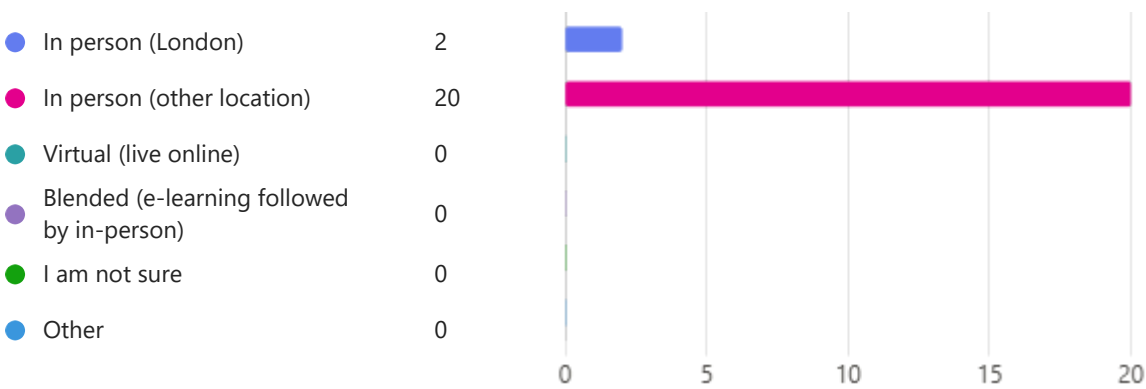
“4 The Mediterranean Sea Emission Control Area ~~for Sulphur Oxides and Particulate Matter~~ includes all waters bounded by the coasts of Europe, Africa and Asia, and is described by the following coordinates: (...)

ANNEX V
EVALUATION QUESTIONNAIRE

Responses Overview Active



1. How was the training/event delivered?



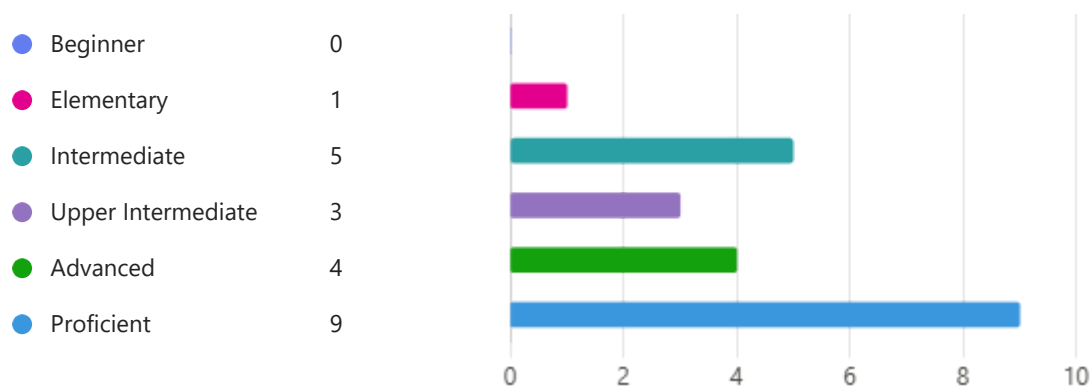
2. Did you experience any IT connectivity issues?

Yes	0
No	0

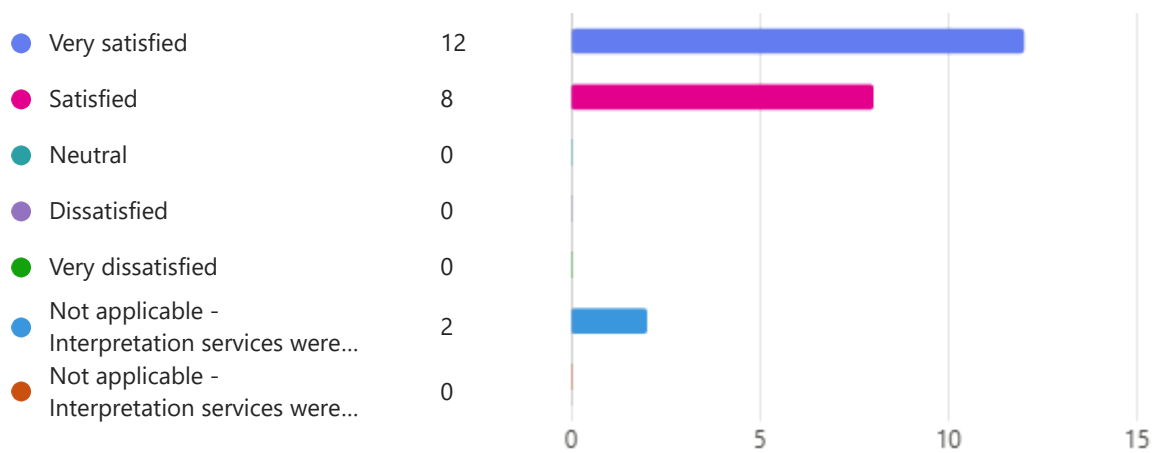
3. Which of the following best describes the reason for the connectivity issues?

IMO's platform crashed	0
Slow/weak network on IMO's side	0
Slow/weak network on my side	0
My network does not support such heavy connections	0
IMO's platform is not supported by the devices that I have available	0
Other	0

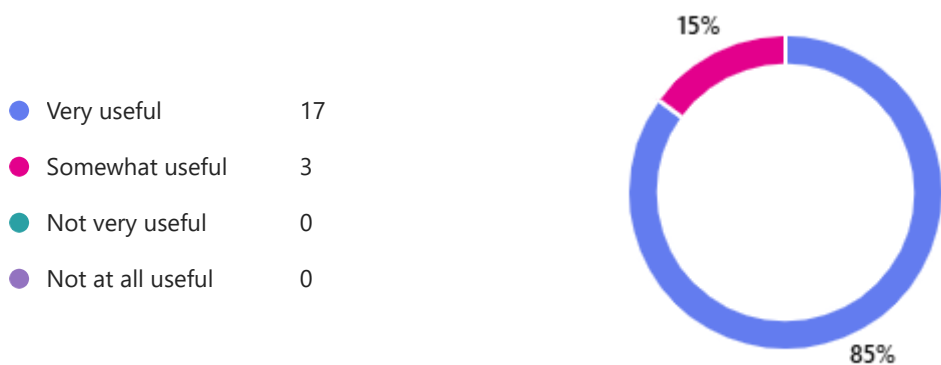
4. How would you assess your level of proficiency in the training/event's primary language?



5. How satisfied were you with the interpretation services provided during the training/event?



6. How useful were the interpretation services in helping you follow the content of the training/event?

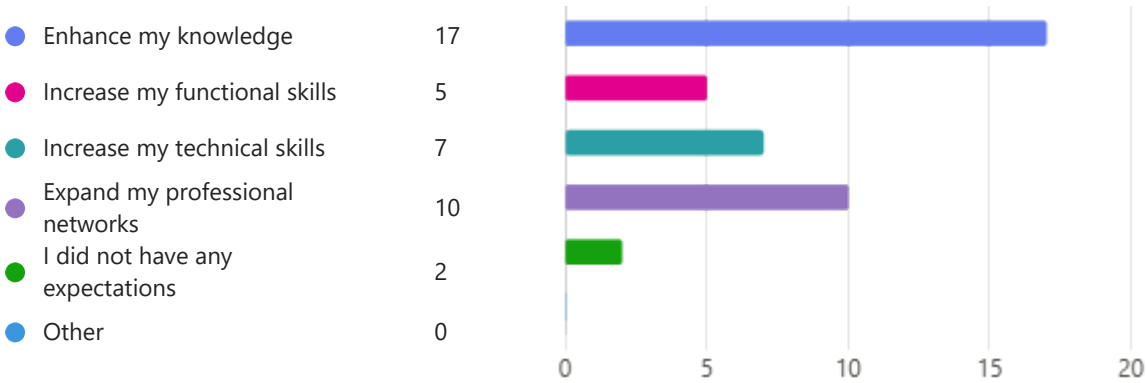


7. Would you like to add any feedback on the interpretation services provided?

3
Responses

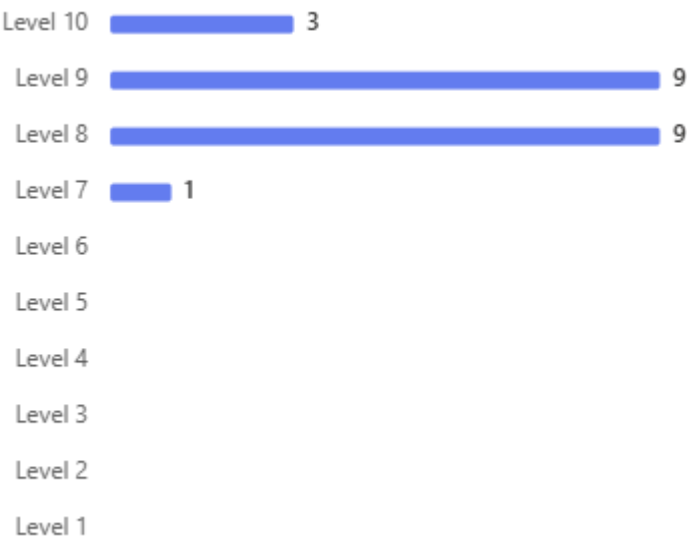
Latest Responses
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8. Before the event/training, what were you expecting to achieve?

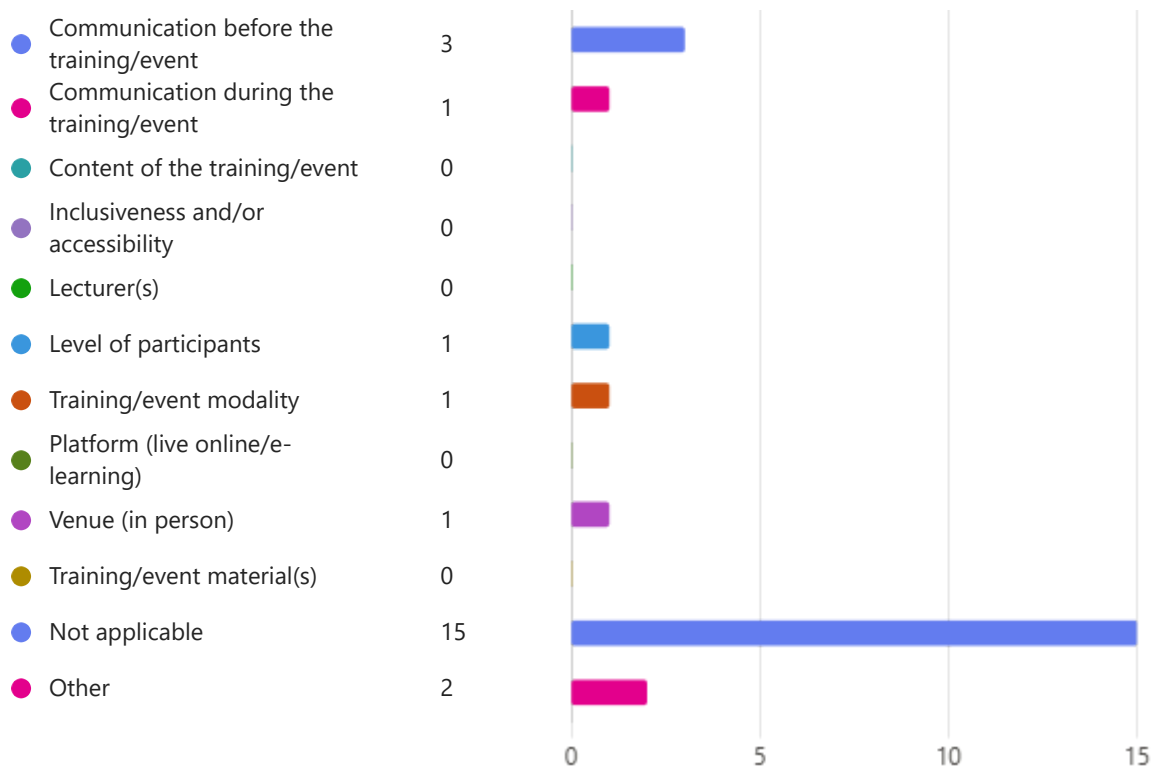


9. After the event/training, using a scale from 1 to 10, where 1 means “Not met” and 10 means “Exceeded”, would you say that your expectations were...

8.64
Average Rating



10. Which of the following have failed to meet your expectations?



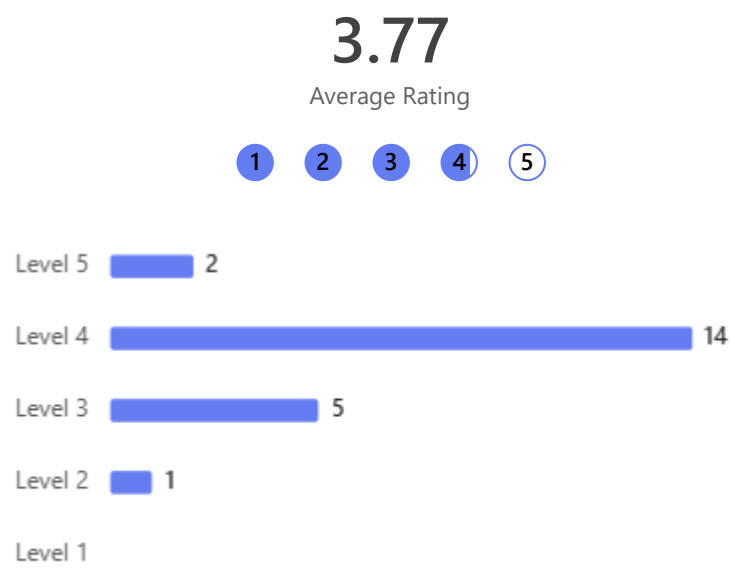
11. Using a scale of 1 to 5, where 1 means "Limited" and 5 means "Excellent", how would you rate your **knowledge** on the subject areas of training/event?



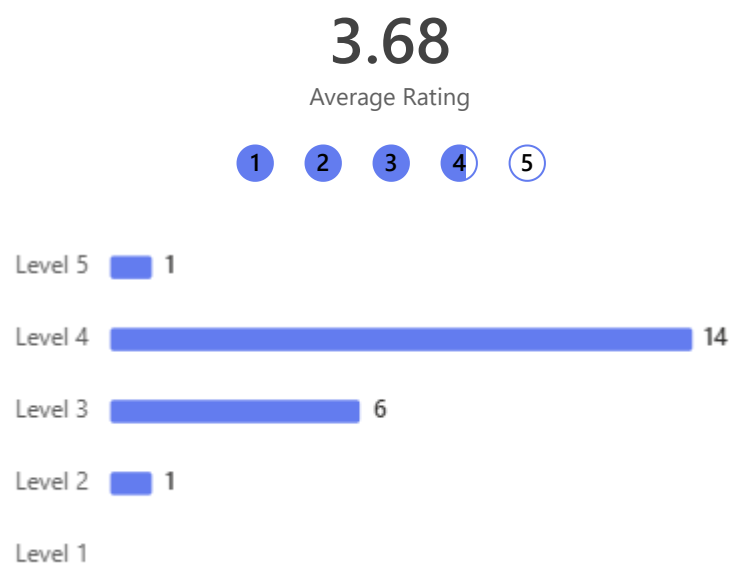
12. Using a scale of 1 to 5, where 1 means limited and 5 means excellent, how would you rate your **s kill set** on the subject areas of training/event?



13. Using a scale of 1 to 5, where 1 means "Limited" and 5 means "Excellent", how would you rate yo ur **knowledge** on the subject areas of training/event?

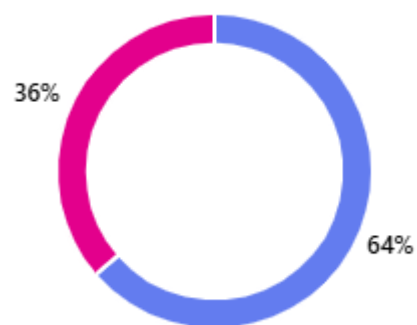


14. Using a scale of 1 to 5, where 1 means "Limited" and 5 means "Excellent", how would you rate your **skill set** on the subject areas of training/event?

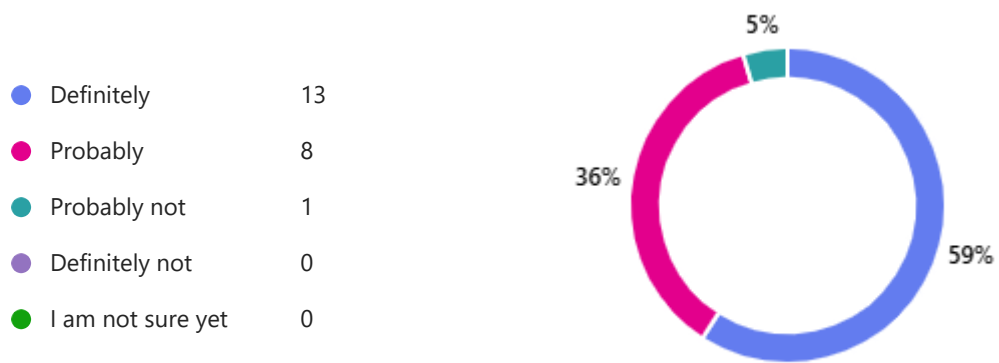


15. Will the knowledge and/or skills acquired through this training/event assist you in the performance of your duties?

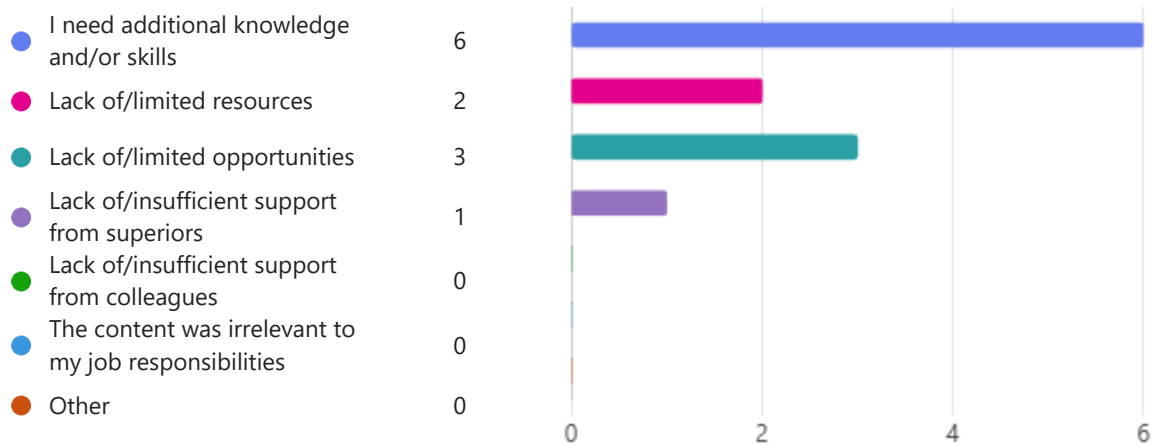
It will definitely improve it	14
It will probably improve it	8
It will not change	0
I am not sure yet	0



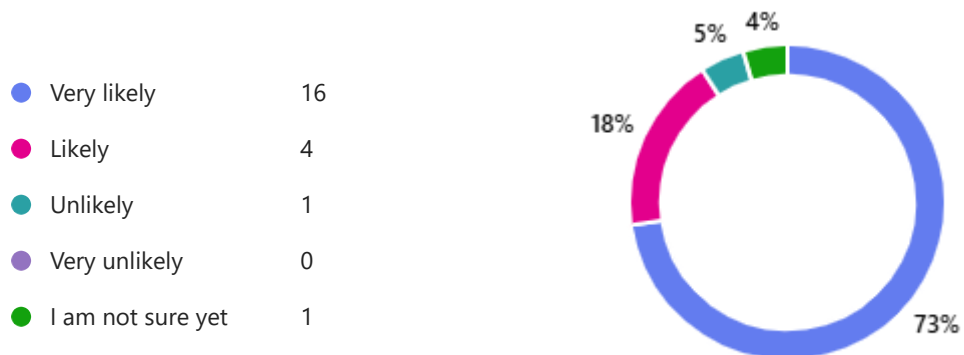
16. Will you be able to apply what you learned in your work?



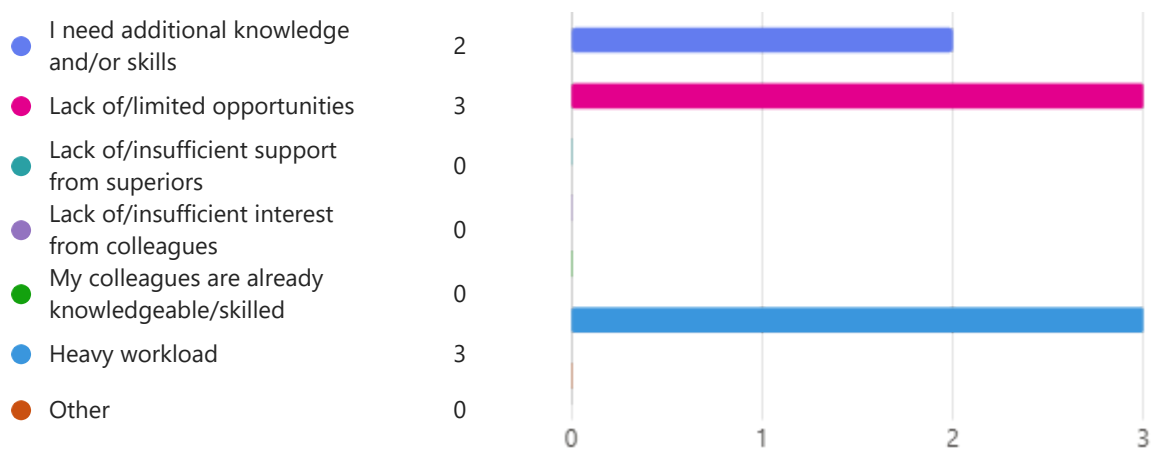
17. What factors could keep you from doing so?



18. How likely are you to transfer the knowledge and/or skills acquired to your colleagues at work?



19. What factors could prevent you from doing so?



20. Please indicate whether you agree or disagree with the following statements concerning the content of the training/event:

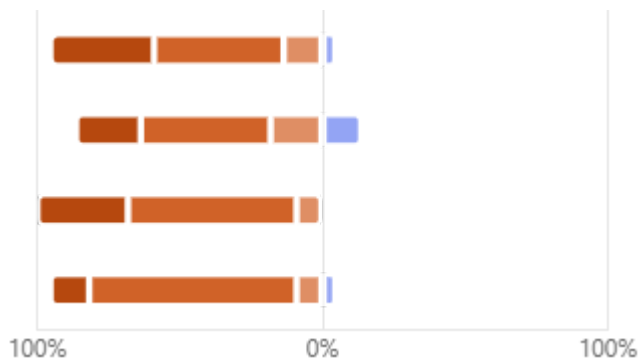
- Strongly agree ● Agree ● Somewhat agree ● Somewhat disagree ● Disagree
- Strongly disagree

The content was relevant to the priorities of my administration

The content addressed specific challenges and needs that I have been facing in my job

The content was appropriate for the audience

The length was appropriate for the content covered



21. Please indicate whether you agree or disagree with the following statements concerning the materials of the training/event:

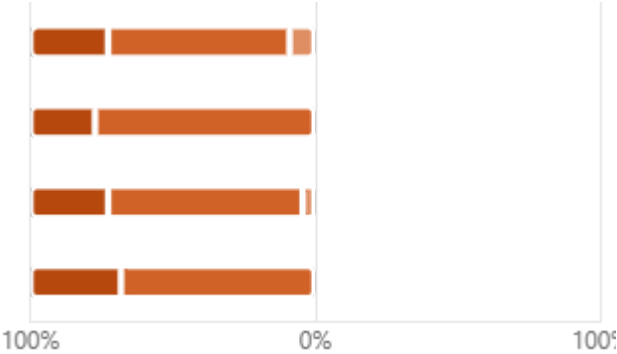
- Strongly agree ● Agree ● Somewhat agree ● Somewhat Disagree ● Disagree
● Strongly disagree

The materials effectively supplemented the lectures

The materials were well-designed and logically structured

The materials were comprehensive and technically sound

The materials were clear and easy to read



22. Please indicate whether you agree or disagree with the following statements concerning the structure of the training/event:

- Strongly agree ● Agree ● Somewhat agree ● Somewhat disagree ● Disagree
- Strongly disagree

The training/event was well-organized and easy to follow

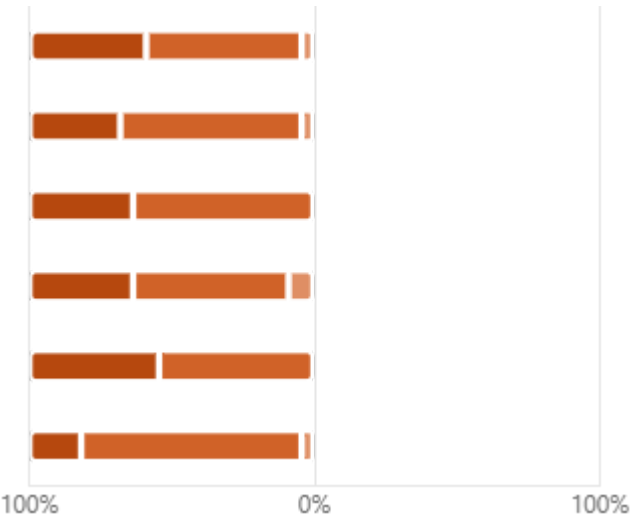
The pace was appropriate for the audience

The delivery modality was convenient and conducive to learning

The venue and/or platform was easy to access

Opportunities were provided for networking and collaboration with colleagues

Opportunities were provided for hands-on practice and application of the concepts learned



23. Were there any lecturers in the training/event?

- Yes 20
- No 2



24. Please indicate whether you agree or disagree with the following statements concerning the lecturer(s) of the training/event:

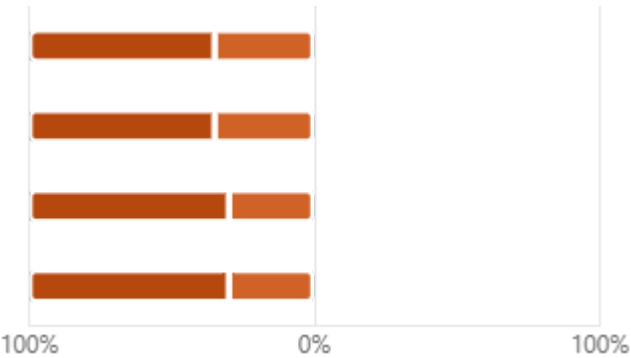
- Strongly agree ● Agree ● Somewhat agree ● Somewhat disagree ● Disagree
- Strongly disagree

The lecturer(s) demonstrated extensive knowledge to the audience

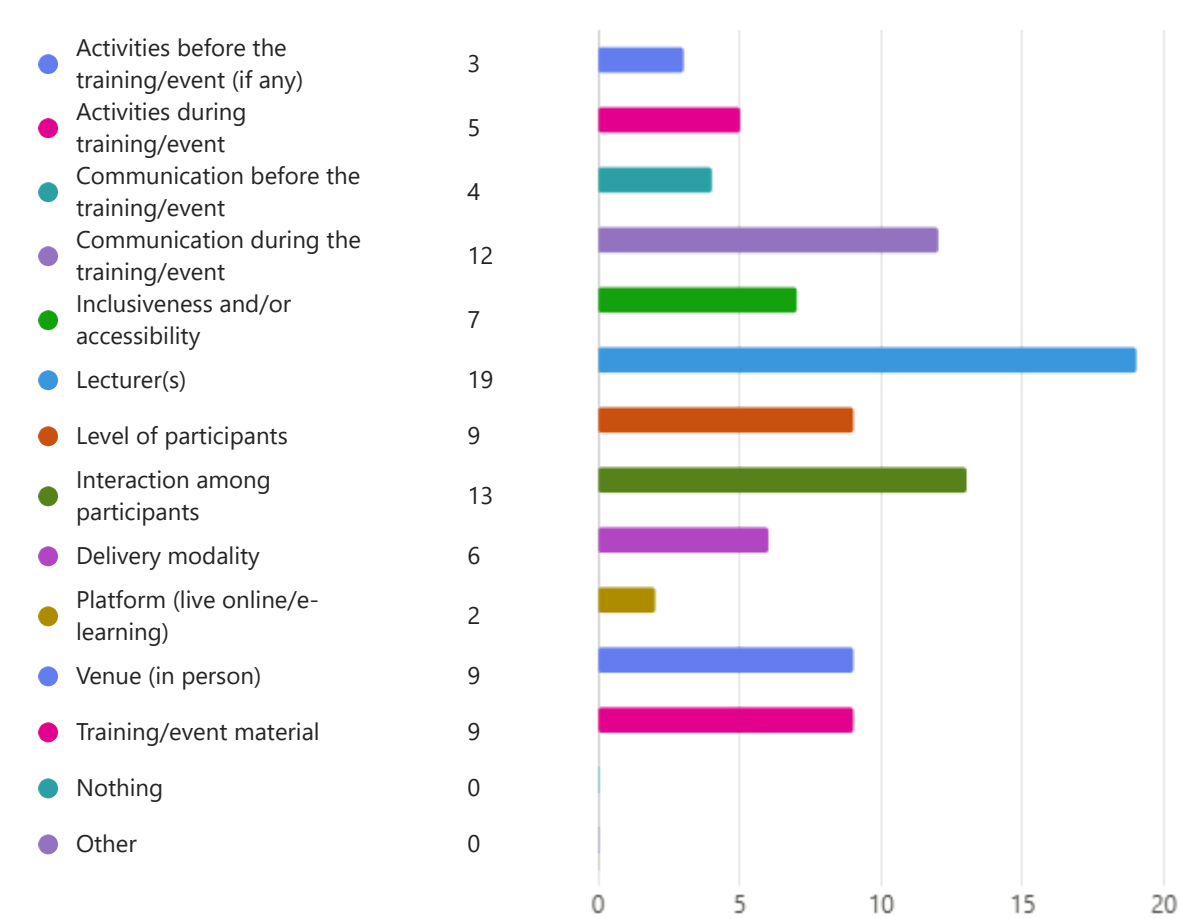
The lecturer(s) effectively engaged the audience and facilitated learning

The lecture(s) effectively addressed questions and concerns raised by the audience

The lecturer(s) provided timely and helpful feedback during the training



25. What did you like the most?



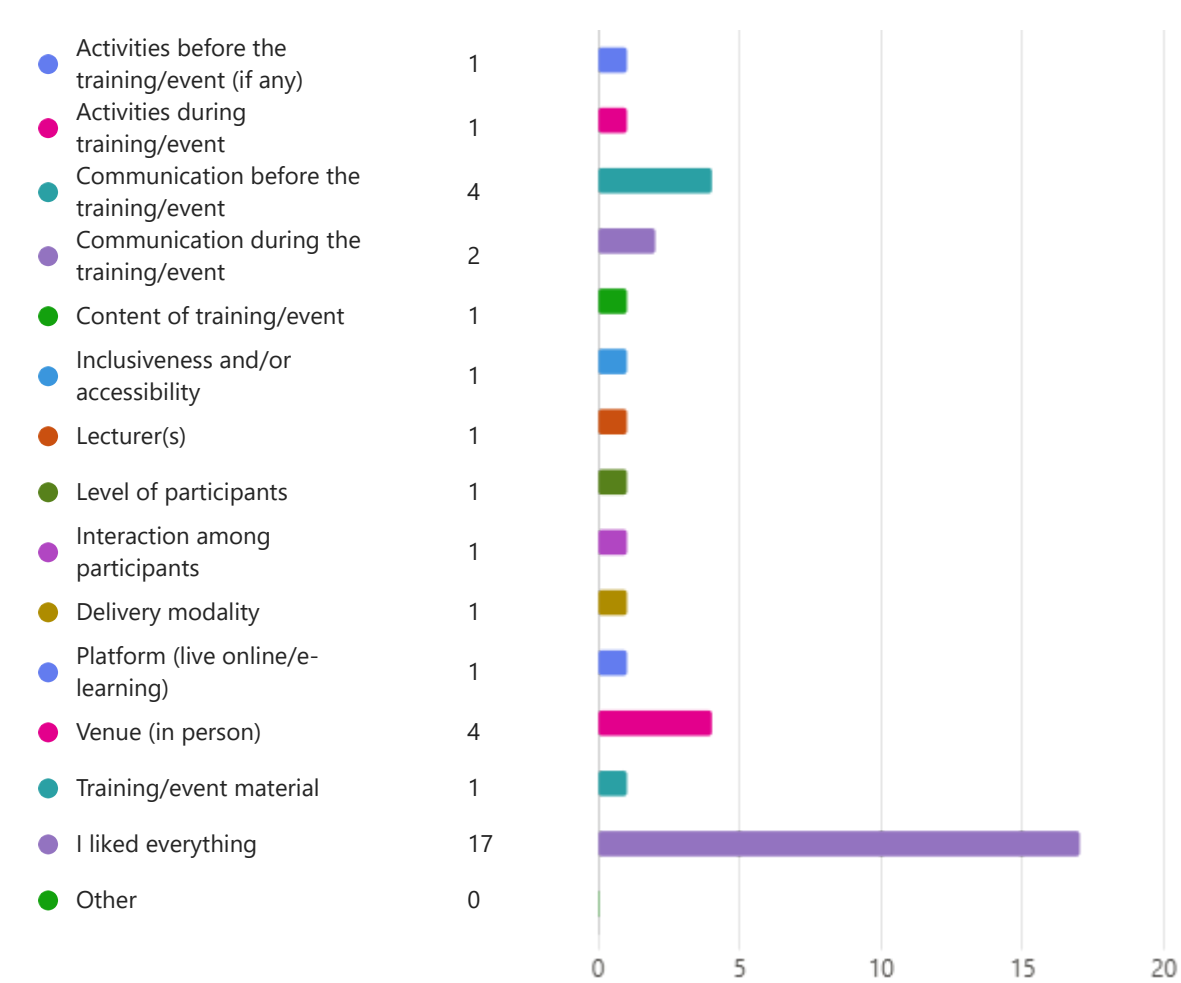
26. Why did you like it?

3
Responses

Latest Responses

...

27. What did you like the least?

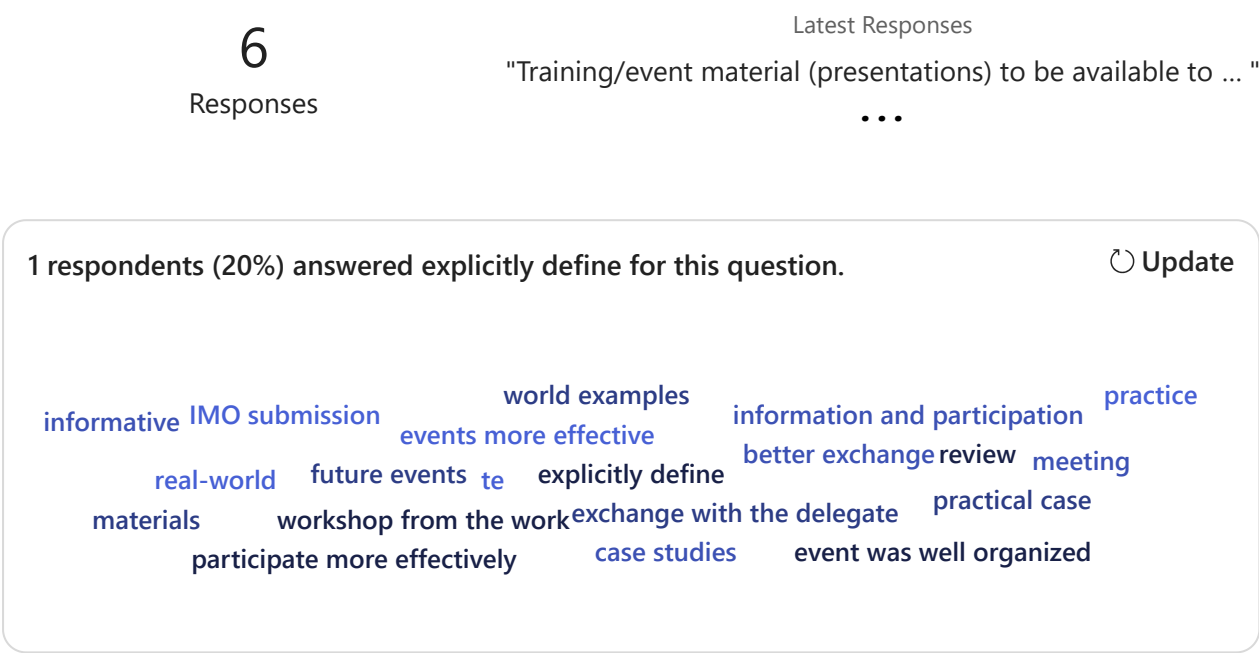


28. Why did you not like it?

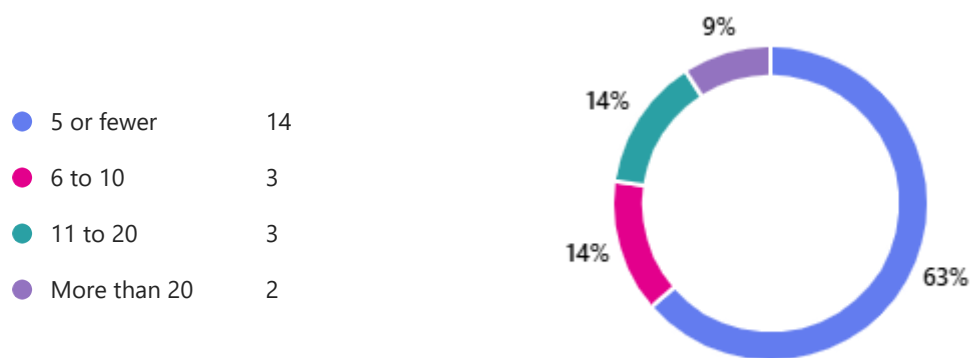
4
Responses

Latest Responses
"Nerrow sitting space, freezing cold"
...

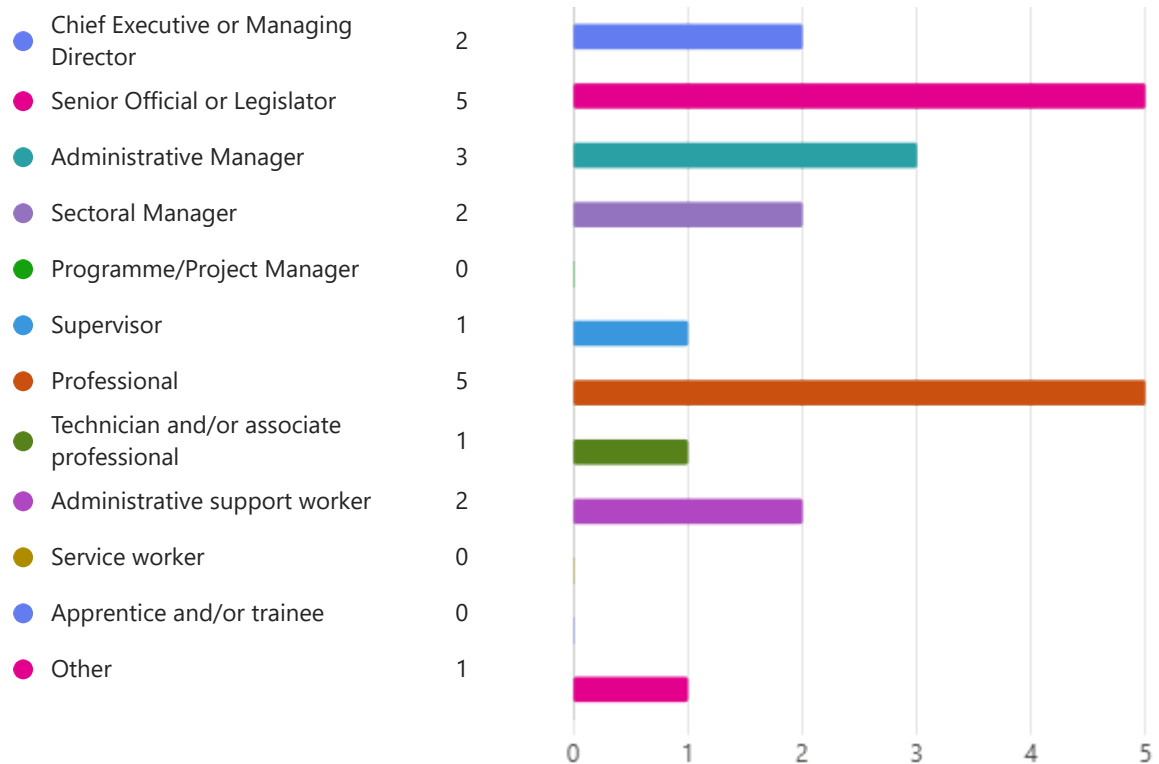
29. In your opinion, how could this training/event be improved to make it a more effective learning experience?



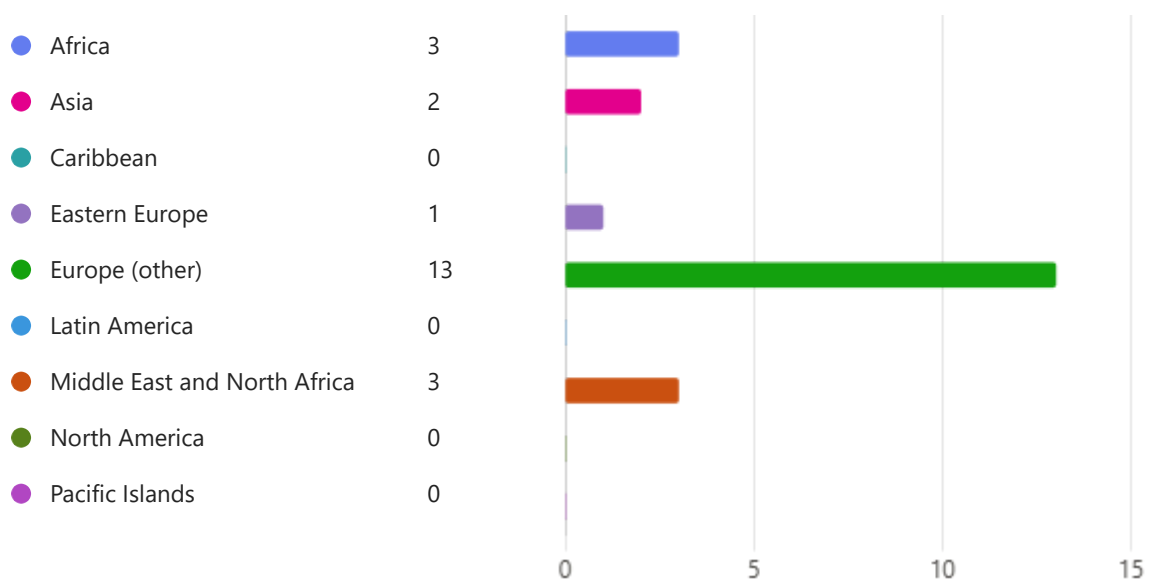
30. How many years of experience do you have in the subject covered by the training/event?



31. Which of the following best describes your current occupation?

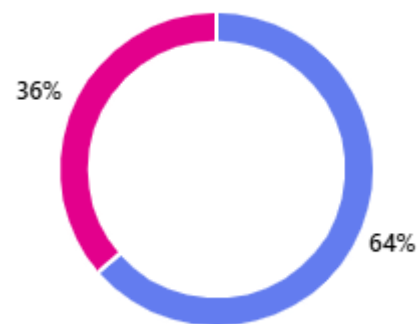


32. **Region.** Please indicate the region you are representing in this event.



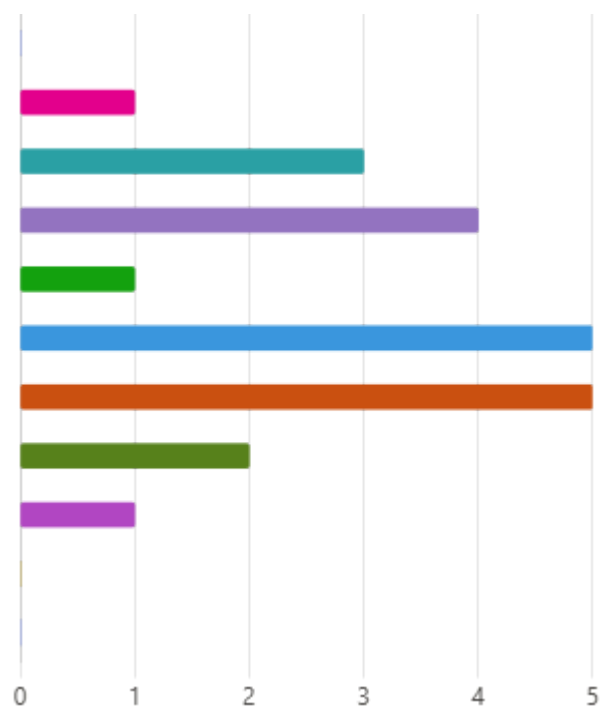
33. **Gender.** How do you identify?

Male	14
Female	8
Non-binary	0
Prefer not to say	0
Other	0

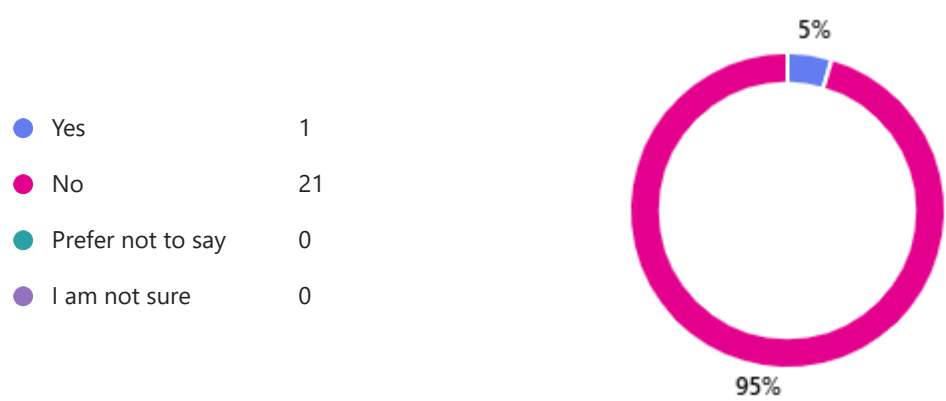


34. **Age.** What age group do you fall in?

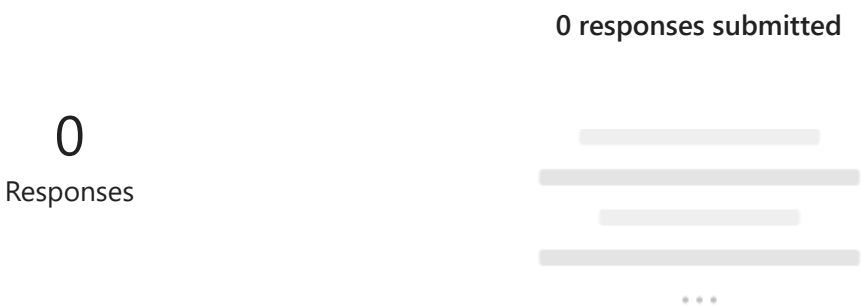
18 – 24	0
25 – 29	1
30 – 34	3
35 – 39	4
40 – 44	1
45 – 49	5
50 – 54	5
55 – 59	2
60 – 64	1
65+	0
Prefer not to say	0



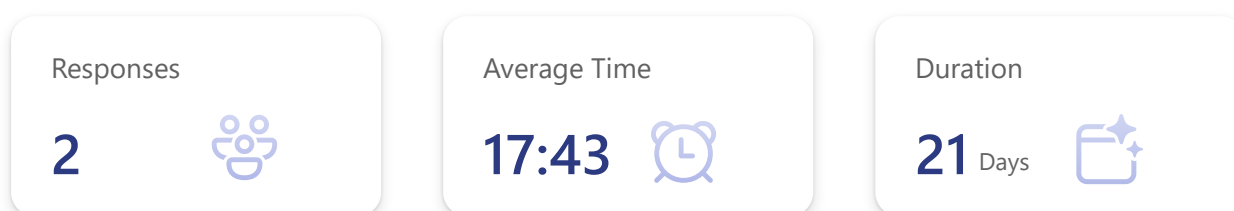
35. Do you have a disability which may limit your participation in this type of activity?



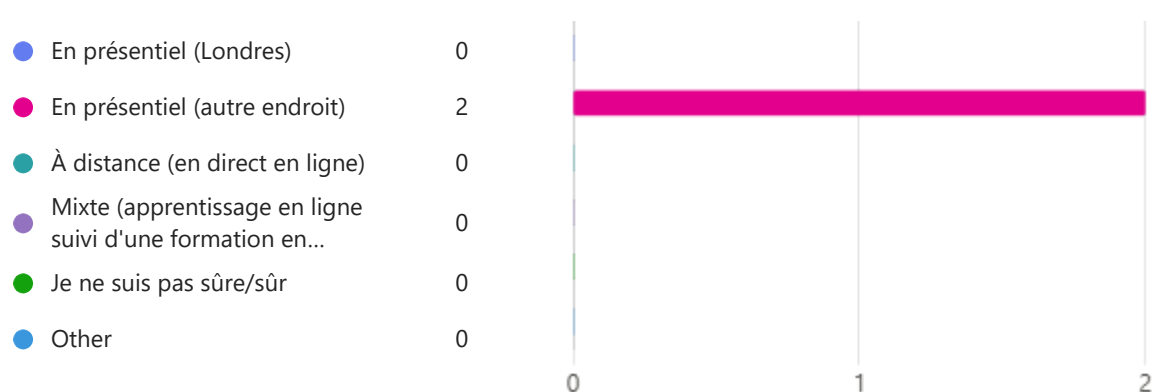
36. To help us ensure that future training/events are accessible to everyone, please let us know what accessibility requirements we might need to take into consideration



Responses Overview Active



1. Quelles étaient les modalités de la formation/l'événement ?



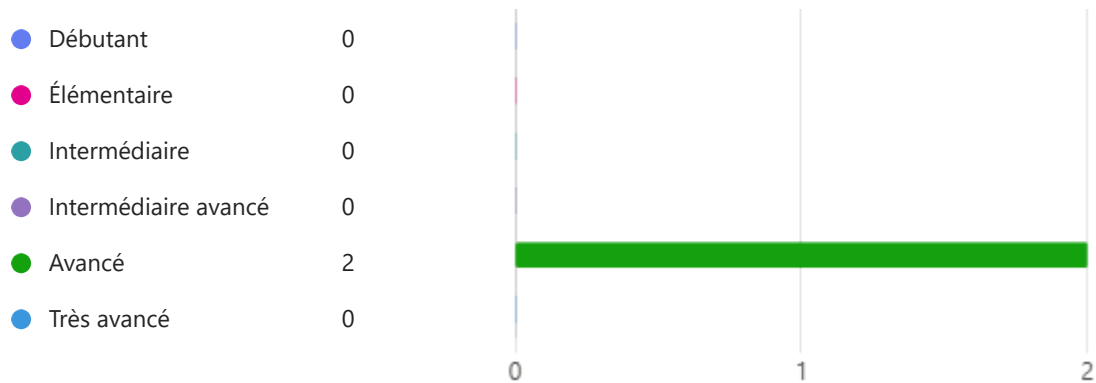
2. Avez-vous rencontré des problèmes de connectivité informatique?

Oui	0
Non	0

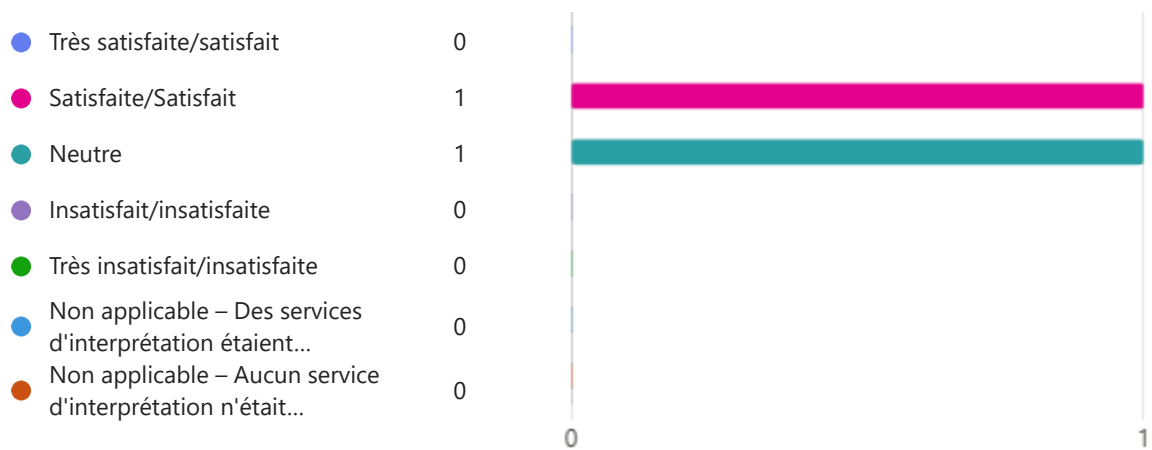
3. Parmi les éléments suivants, lesquels décrivent le mieux la cause des problèmes de connectivité rencontrés ?

La plateforme de l'OMI a connu un dysfonctionnement	0
Réseau lent/faible du côté de l'OMI	0
Réseau lent/faible de mon côté	0
Ma bande passante est insuffisante pour gérer une charge aussi importante	0
La plateforme de l'OMI n'est pas prise en charge par les appareils dont je dispose	0
Other	0

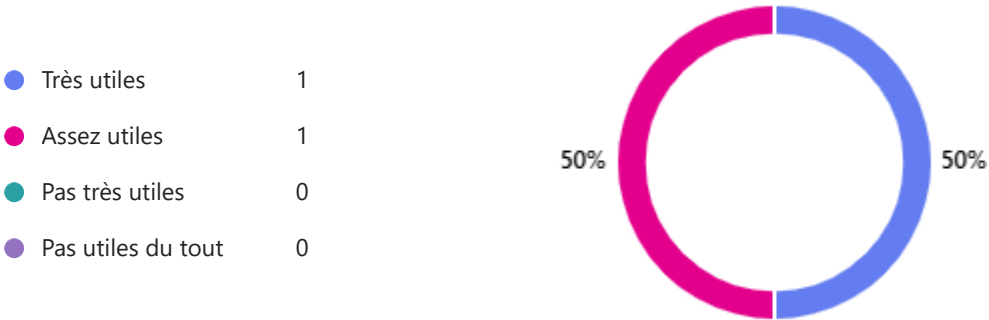
4. Comment évalueriez-vous votre niveau de compétence dans la langue principale de la formation/ de l'événement ?



5. Décrivez votre niveau de satisfaction concernant les services d'interprétation dispensés au cours de la formation/de l'événement



6. Décrivez dans quelle mesure les services d'interprétation vous ont été utiles afin de suivre le contenu de la formation ou de l'événement

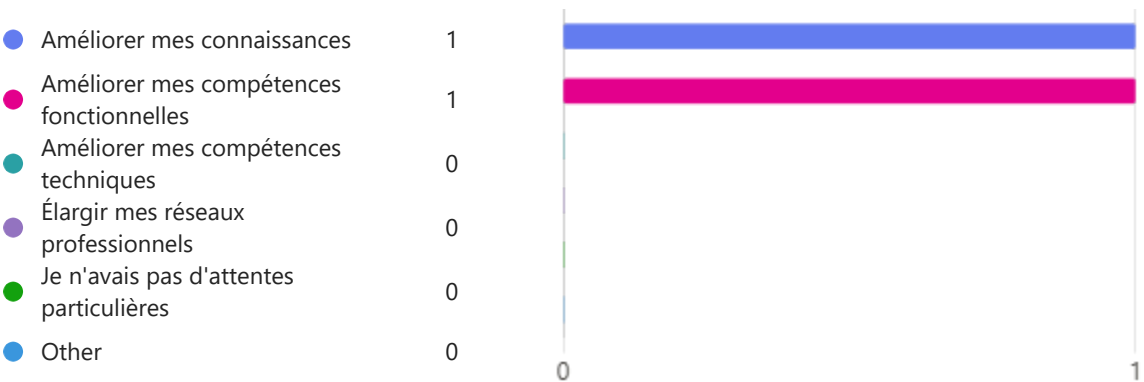


7. Souhaitez-vous ajouter des observations relatives aux services d'interprétation dispensés ?

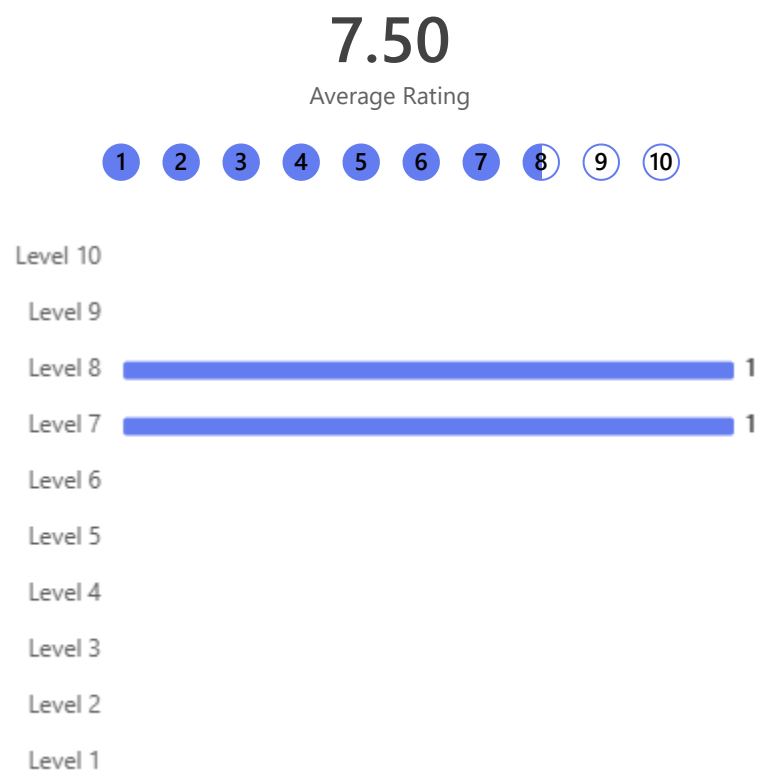
1
Responses

Latest Responses
"Sujet technique difficile pour la traduction"

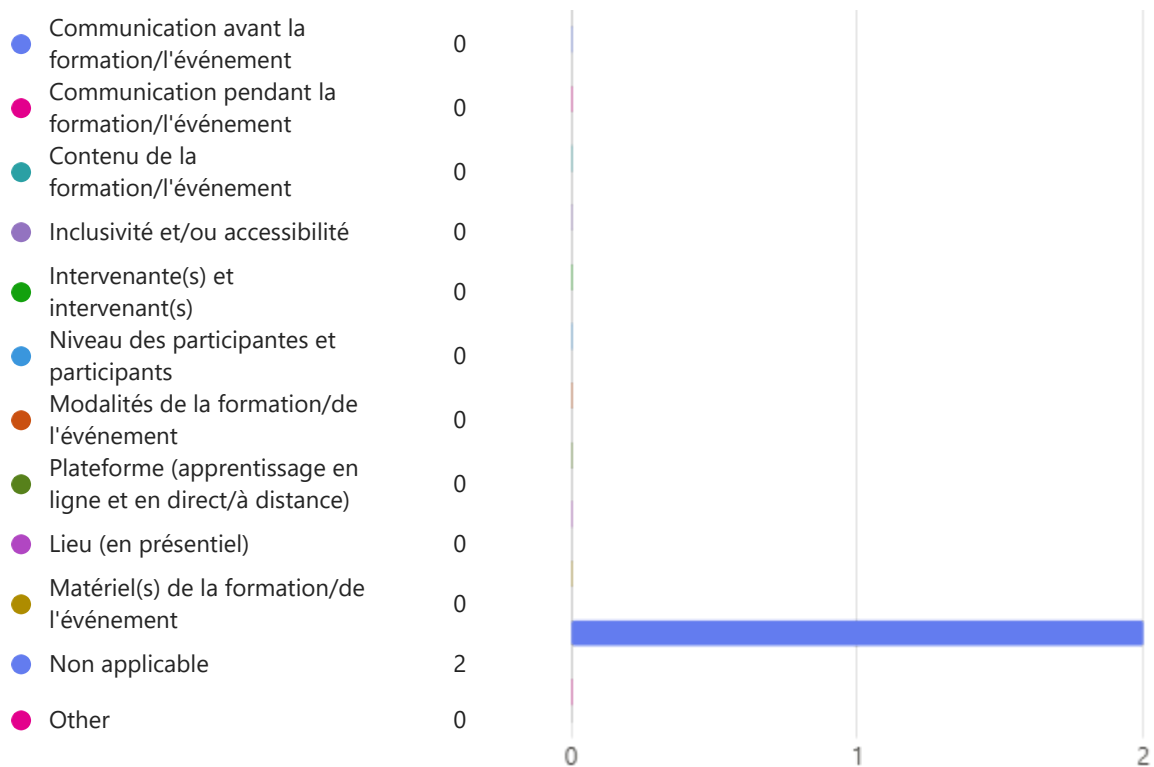
8. Avant l'événement/la formation, quels étaient vos objectifs ?



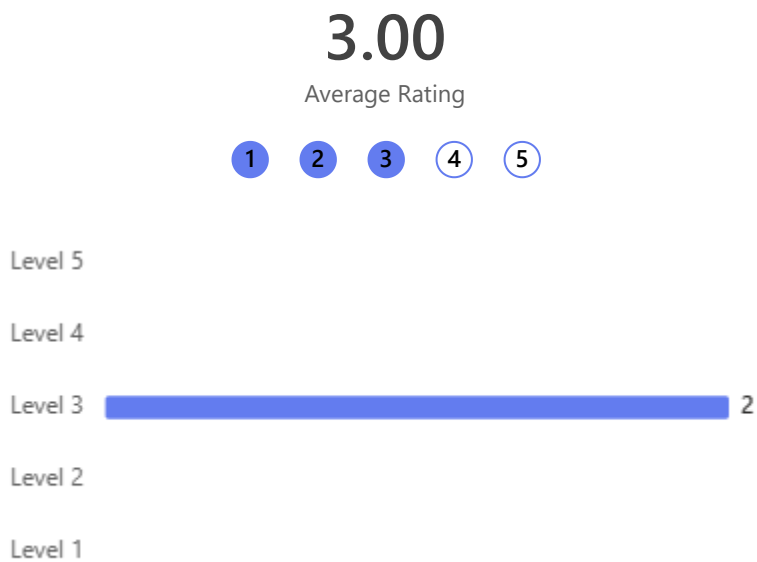
9. Après l'événement/la formation, sur une échelle de 1 à 10, où 1 signifie "Mes attentes étaient insatisfaites" et 10 "Les résultats étaient supérieurs à mes attentes", diriez-vous que vos attentes étaient...



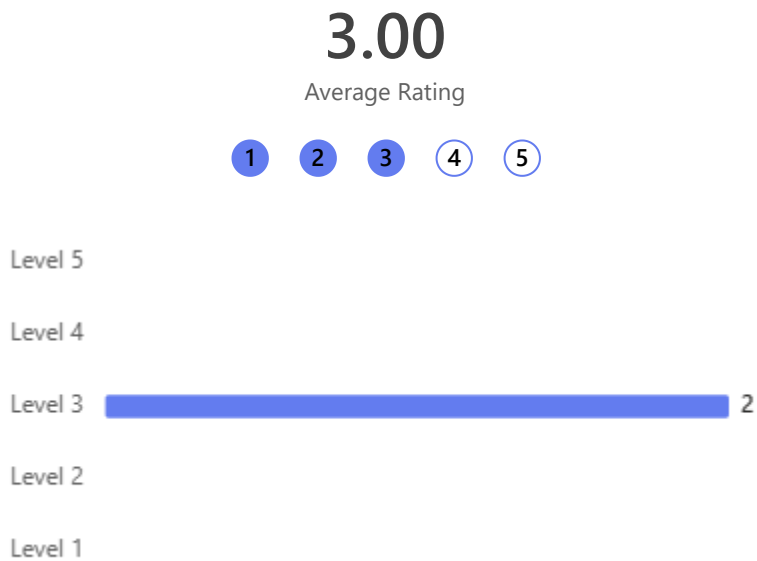
10. Parmi les éléments suivants, lesquels n'ont pas répondu à vos attentes ?



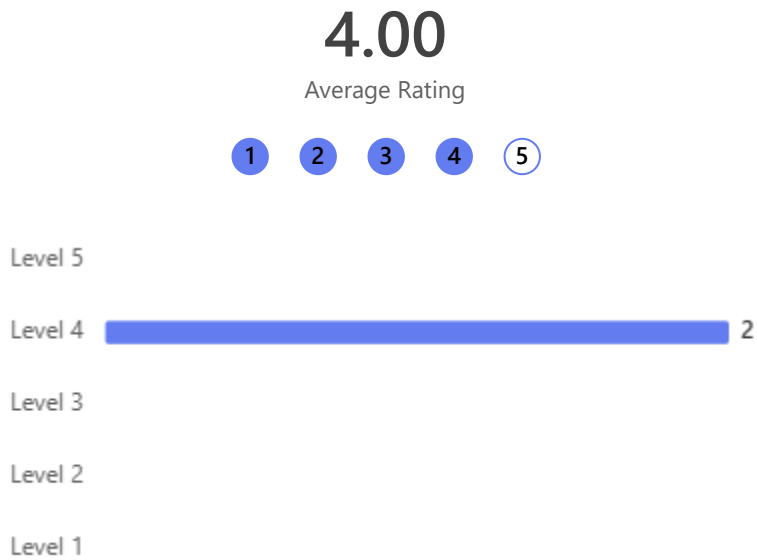
11. Sur une échelle de 1 à 5, où 1 signifie "limitées" et 5 "excellentes", comment évalueriez-vous vos **connaissances** dans les domaines visés par la formation/l'événement ?



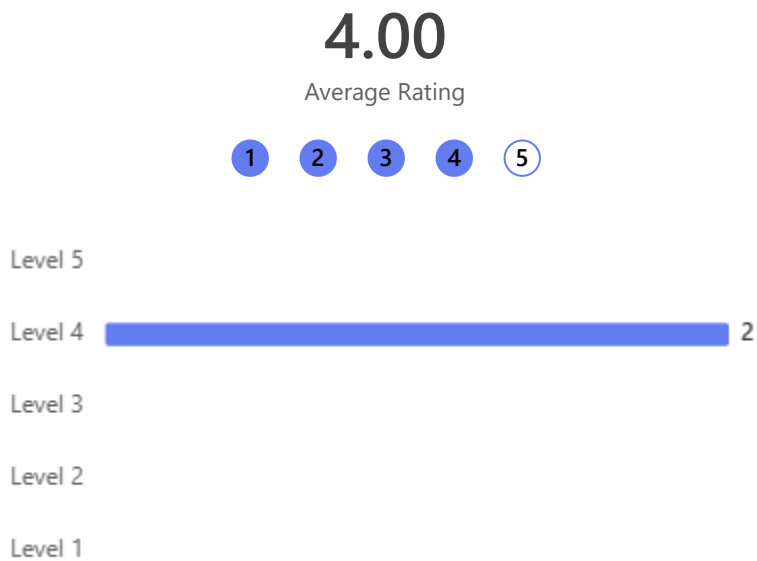
12. Sur une échelle de 1 à 5, où 1 signifie "limitées" et 5 "excellentes", comment évalueriez-vous vos **compétences** dans les domaines visés par la formation/l'événement ?



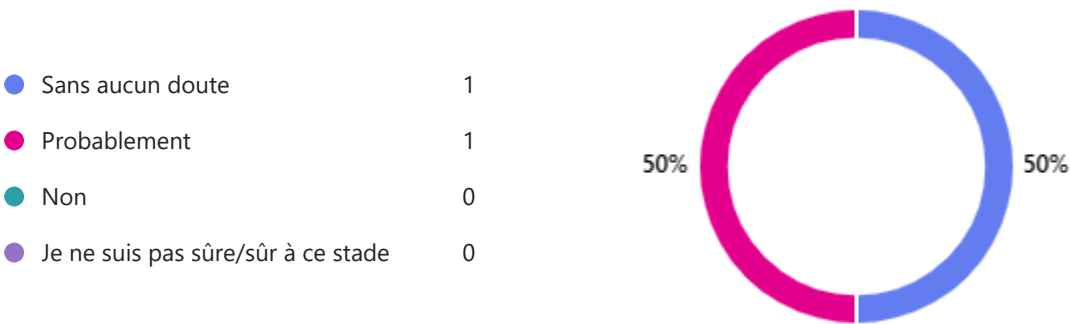
13. Sur une échelle de 1 à 5, où 1 signifie "limitées" et 5 "excellentes", comment évalueriez-vous vos **connaissances** dans les domaines visés par la formation/l'événement ?



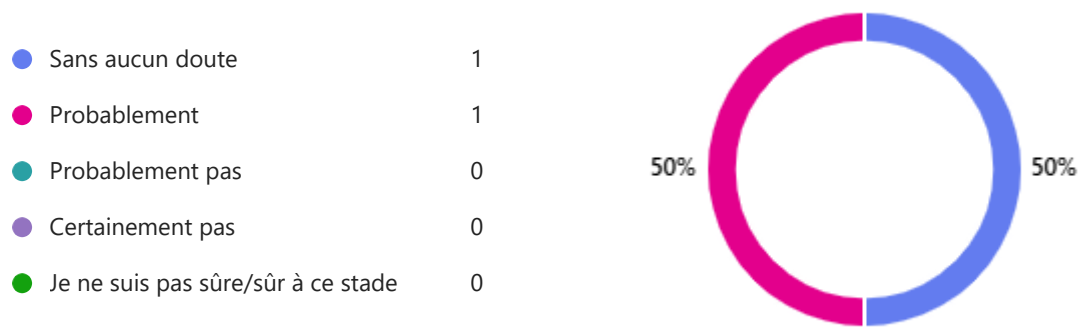
14. Sur une échelle de 1 à 5, où 1 signifie "limitées" et 5 "excellentes", comment évalueriez-vous vos **compétences** dans les domaines visés par la formation/l'événement ?



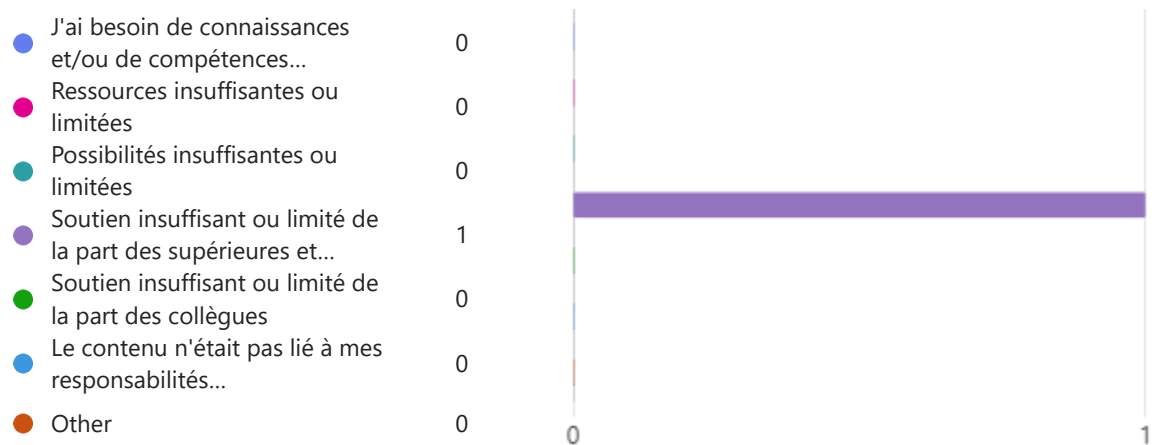
15. Les connaissances et/ou compétences acquises dans le cadre de cette formation/de cet événement vous aideront-elles dans l'exercice de vos fonctions ?



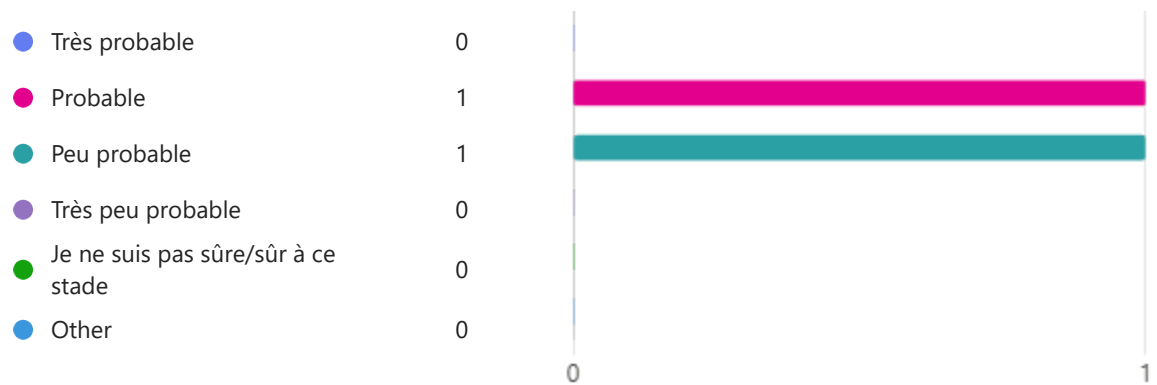
16. Serez-vous en mesure d'appliquer dans votre travail ce que vous avez appris ?



17. Quels sont les facteurs qui pourraient vous empêcher d'appliquer dans votre travail ce que vous avez appris ?



18. Est-il probable que vous transfériez les connaissances et/ou compétences acquises à vos collègues de travail?



19. Quels sont les facteurs qui pourraient vous en empêcher ?



20. Veuillez indiquer si vous êtes d'accord ou non avec les affirmations ci-après concernant le **contenu** de la formation/de l'événement

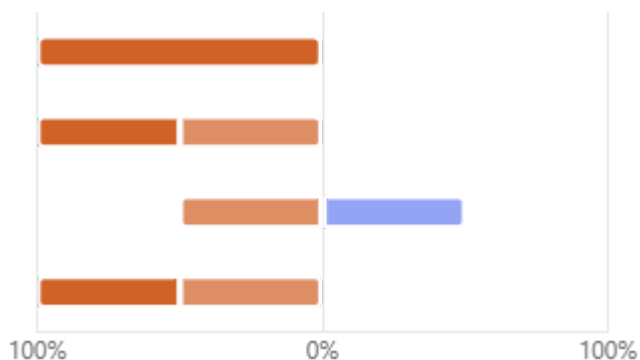
- Entièrement d'accord ● D'accord ● Plutôt d'accord ● Plutôt pas d'accord ● Pas d'accord
 ● Pas du tout d'accord

Le contenu était pertinent eu égard aux priorités de mon administration

Le contenu abordait des défis et besoins spécifiques auxquels j'ai été confronté/e dans mon travail

Le contenu était adapté au public

La durée était adaptée au contenu traité



21. Veuillez indiquer si vous êtes d'accord ou non avec les affirmations ci-après concernant les **supports** mis à disposition lors de la formation/de l'événement

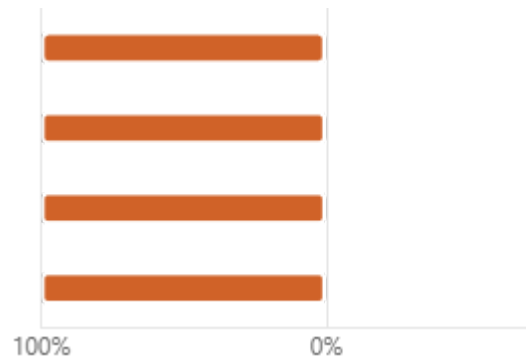
● Entièrement d'accord ● D'accord ● Plutôt d'accord ● Plutôt pas d'accord ● Pas d'accord
● Pas du tout d'accord

Les supports ont complété les séminaires de manière efficace

Les supports étaient bien conçus et structurés de manière logique

Les supports étaient complets et rigoureux sur le plan technique

Les supports étaient clairs et faciles à lire



22. Veuillez indiquer si vous êtes d'accord ou non avec les affirmations ci-après concernant la **structure** de la formation/de l'événement

- Entièrement d'accord
- D'accord
- Plutôt d'accord
- Plutôt pas d'accord
- Pas d'accord
- Pas du tout d'accord

La formation/l'événement était bien organisée/organisé et facile à suivre

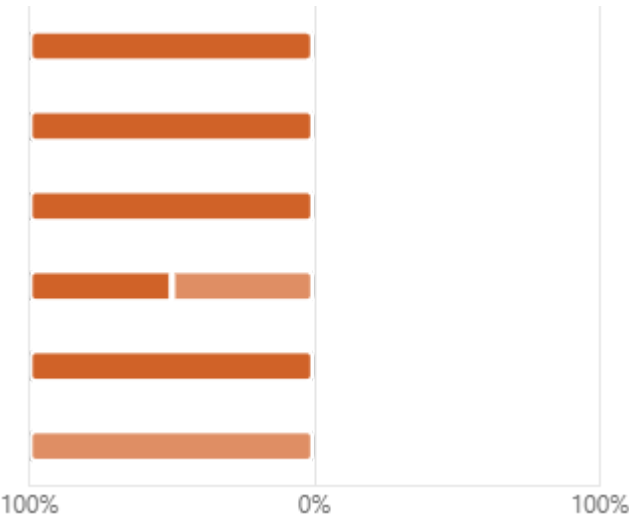
Le rythme était adapté au public

Les modalités d'exécution étaient accessibles et propices à l'apprentissage

Le lieu et/ou la plateforme étaient faciles d'accès

J'ai obtenu des possibilités de mise en réseau et de collaboration avec des collègues

Des possibilités de travaux pratiques et d'application des concepts appris ont été proposées



23. Y avait-il des conférencières/conférenciers lors de la formation/de l'événement ?

- Oui 2
- Non 0



24. Veuillez indiquer si vous êtes d'accord ou non avec les affirmations suivantes concernant les **conférencières/conférenciers** de la formation/de l'événement

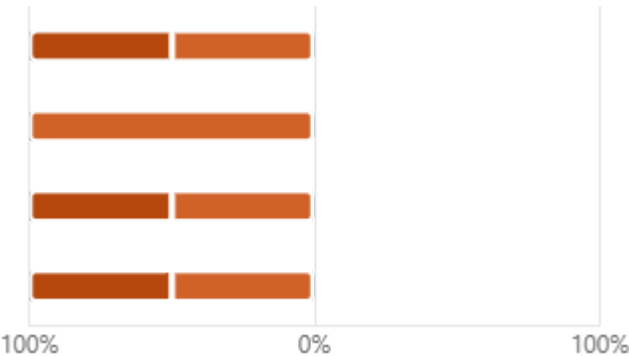
- Entièrement d'accord ● D'accord ● Plutôt d'accord ● Plutôt pas d'accord ● Pas d'accord
- Pas du tout d'accord

Les conférencières/conférenciers ont démontré au public une connaissance approfondie

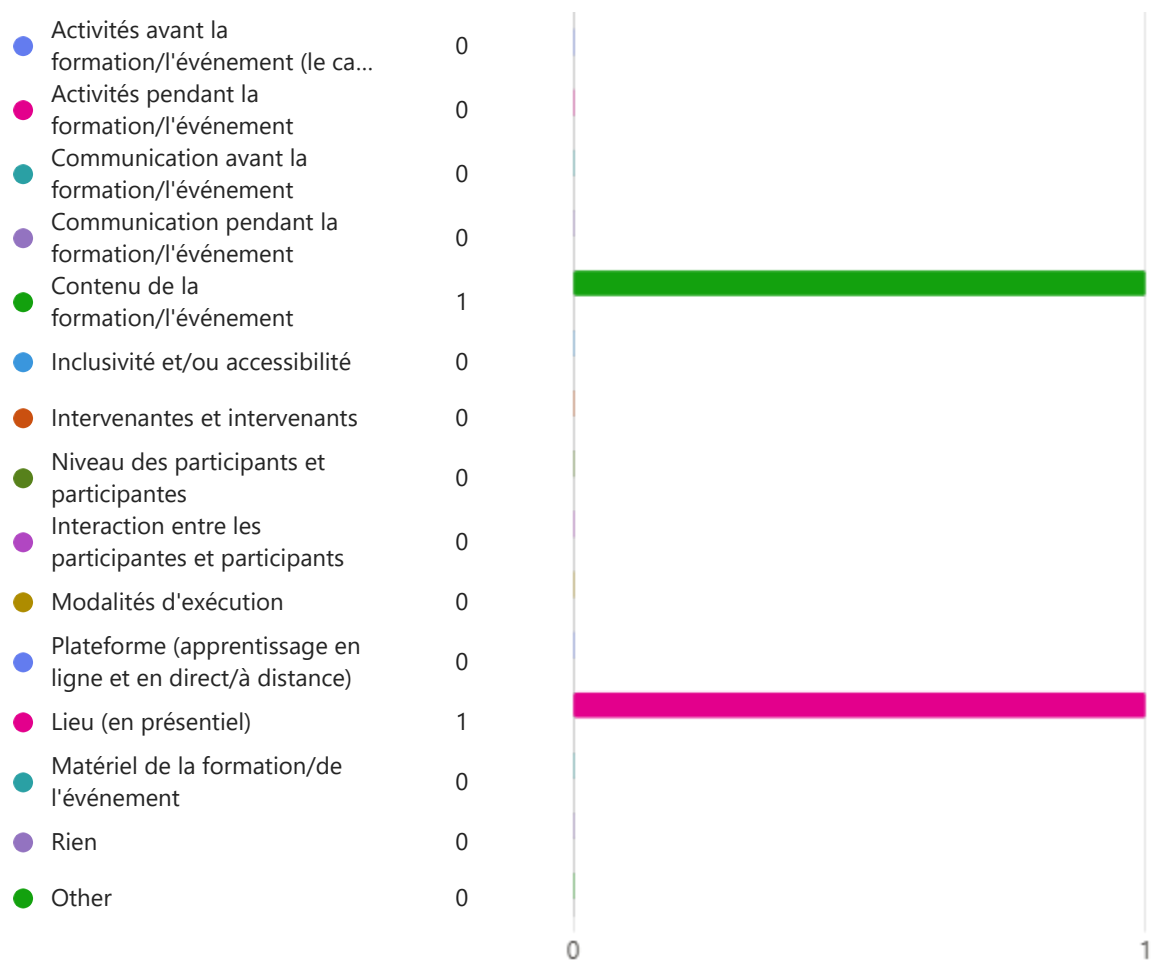
Les conférencières/conférenciers ont fait participer de manière efficace le public et facilité l'apprentissage

Les conférencières/conférenciers ont répondu de manière efficace aux questions et préoccupations soulevées par le public

Les conférencières/conférenciers ont fourni des informations en retour opportunes et utiles pendant la formation



25. Qu'avez-vous le plus apprécié ?



26. Veuillez expliquer pourquoi vous avez apprécié la formation/l'événement.

2
Responses

Latest Responses

"Conférenciers impliqués, personnel motivé dans l'ensemble"
"formation utile pour appuyer la mise en oeuvre de l'anne... "

27. Qu'avez-vous le moins apprécié ?

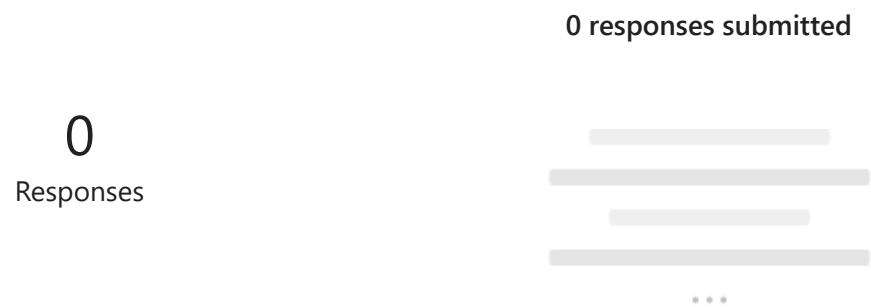


28. Veuillez expliquer pourquoi vous n'avez pas apprécié la formation/l'événement.

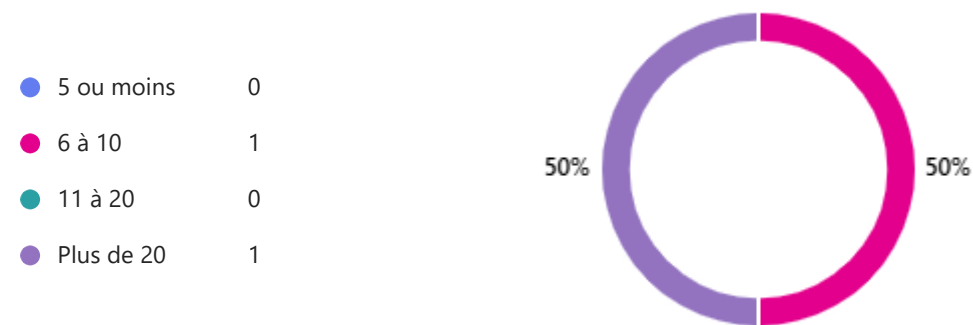
1
Responses

Latest Responses
"pas vrai"

29. Selon vous, comment est-il possible d'améliorer cette formation/cet événement pour en faire un e expérience d'apprentissage plus efficace ?



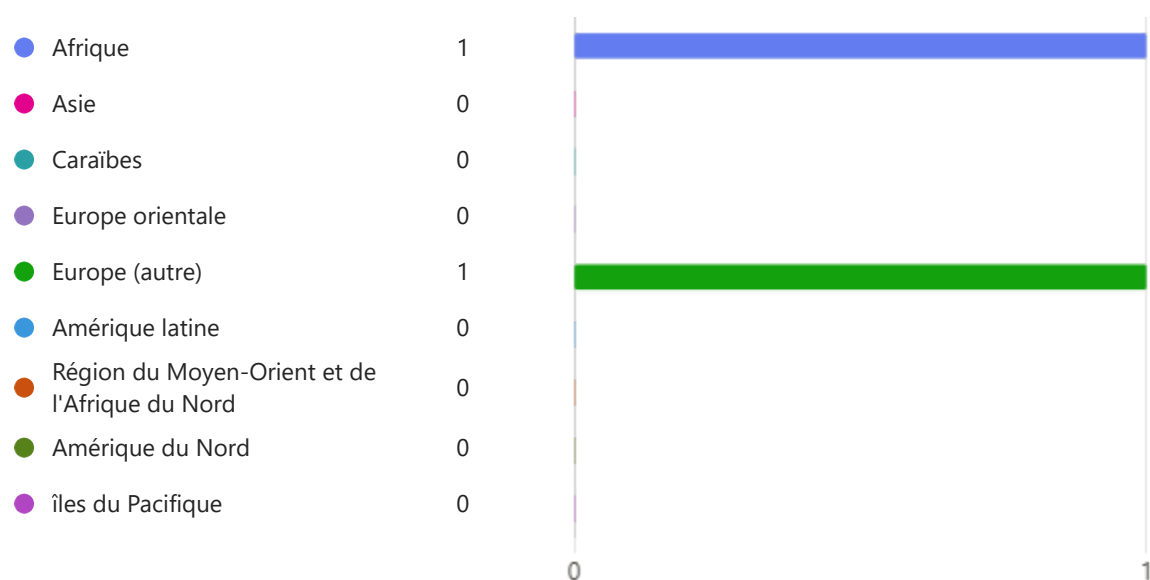
30. Combien d'années d'expérience avez-vous dans le domaine visé par la formation/ l'événement ?



31. Lequel des intitulés suivants décrit le mieux votre emploi actuel ?



32. **Région:** Veuillez indiquer la région que vous représentez dans le cadre de cet événement.



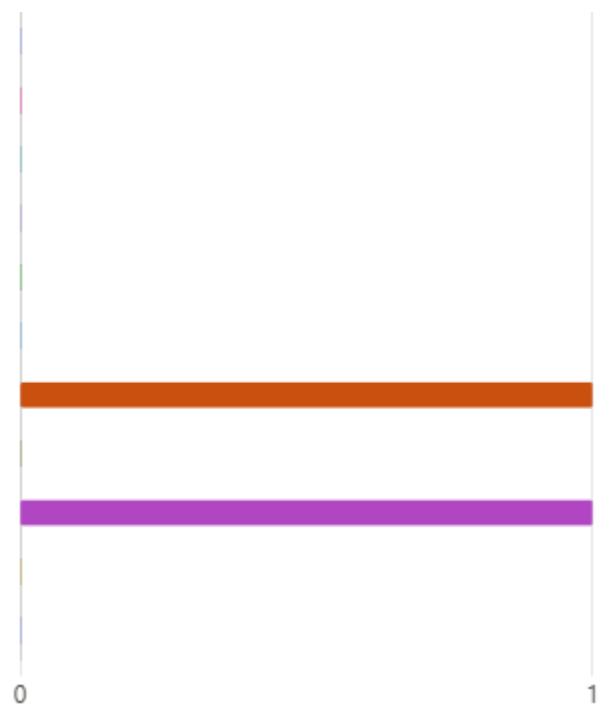
33. **Sexe:** Comment vous identifiez-vous ?

● Homme	1
● Femme	1
● Non-binaire	0
● Préfère ne pas répondre	0
● Other	0



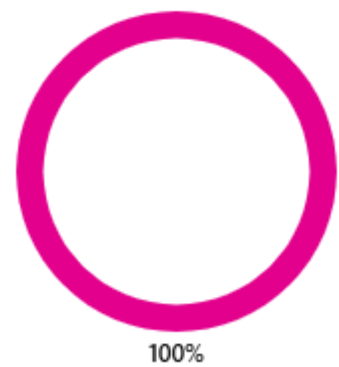
34. **Age:** Dans quel tranche d'âge vous situez-vous ?

● 18 - 24	0
● 25 - 29	0
● 30 - 34	0
● 35 - 39	0
● 40 - 44	0
● 45 - 49	0
● 50 - 54	1
● 55 - 59	0
● 60 - 64	1
● Plus de 65 ans	0
● Préfère ne pas répondre	0



35. Avez-vous un handicap qui pourrait limiter votre participation à ce type d'activité ?

● Oui	0
● Non	2
● Préfère ne pas répondre	0
● Je ne suis pas sûre/sûr	0



36. Pour nous aider à faire en sorte que les formations/événements soient accessibles à toutes et tous à l'avenir, veuillez nous indiquer les exigences que nous devrions prendre en considération en matière d'accessibilité

0 responses submitted

0
Responses

