

Communicative Language Ability in Maritime English: Concept, Significance, and Assessment*

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Abstract: The English language is the lingua franca in the maritime industry - being proficient in English in maritime transport communication is a precursor to safety. The paper aims to explore Maritime English specificities, seafarers' language competence needs and evaluation solutions, and the significance of the concept of communicative language ability in Maritime English as well as to present the assessment instrument and its application in sea communication tasks. The model of communicative language ability with its competences and their significance in the maritime context are presented. This model is valuable for designing an instrument to measure speaking ability in an oral communication task. The instrument Communicative Language Ability Scale (CLAS) and its application in Maritime English communication tasks are analyzed. The implementation of CLAS in English for specific purposes context, which is the crux of Maritime English, showed that the instrument is valid, reliable, and internally consistent. The vocabulary (Standard Maritime Communication Phrases), pragmatic competence, communication strategies, and nonverbal communication factors are of paramount importance in Maritime English communication use.

Keywords: Communicative language ability, Evaluation, Maritime English, Speaking.

1. Introduction

Effective communication in maritime settings may become a life-or-death matter. Maritime English (ME) is essential for ensuring the safety and efficiency of global maritime operations, excelling in the following areas: ensuring safety at sea, navigation and seamanship, international trade and commerce, as well as managing cultural and linguistic diversity. In emergencies, when time is crucial, ME enables seafarers to communicate vital information fast and accurately during distress calls, search and rescue

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operations, and evacuations. This ability is instrumental in reducing risks and saving lives. Additionally, accurate communication among the bridge team, pilots, and shore authorities is essential for navigating through complex waterways and crowded harbours safely. Maritime English ensures the precise understanding and execution of ship positions, navigational warnings, and orders. Furthermore, most international trade occurs by sea. Effective communication in ME among ship crews, port authorities, customs officials, and other stakeholders accelerates the flow of goods and enhances the efficiency of trade operations. And last but not least, ships represent diverse microcosms of nationalities and cultures. Maritime English serves as a universal communication platform, bridging language barriers and promoting a cooperative spirit among the diverse onboard community.

This article delves into the ME specificities, conducting a needs analysis on language competences, and addressing current types of assessment and challenges within this specialized field of English for specific purposes. It also elucidates the concept of communicative language ability. Although several instruments are used for assessing ME language proficiency, such as the Marlins English language test [1], MarTEL [2], and the International Maritime English Testing System (IMETS) [3], there is a paucity of testing solutions addressing the seafarers' speaking ability. They either address the limited scope of language knowledge and competences or underrate speaking ability in Maritime English [1-2]. Even when the instrument is focused on assessing oral communication efficiency (IEMTS)[3], it lacks the refined descriptors as well as the descriptors across language competences, and empirical evidence taken from ME L2 (foreign language) learner data. This article presents the tool for evaluating seafarers' ME speaking ability, based on empirical evidence from EFL, and discusses its application in assessing their communicative language ability and its competences.

2. Background

This section mainly focuses on exploring Maritime English specificities, language competences needed for maritime operations, and language testing solutions, with a particular emphasis on seafarers' communicative language ability.

2.1. Maritime English specificities and competences

Accidents and untoward incidents onboard ships and other vessels often stem from ambiguity and confusion. The presence of diverse languages among crew members can lead to misunderstandings in the interpretation of phrases they intend to communicate. The absence of a shared language

may result in challenges when conveying instructions between officers and crew members. To mitigate this, Maritime English, also known as the Standard Maritime Communication Phrases (SMCP), employs a set of domain-specific terms, eliminating the potential for confusion in meaning and enhancing effective communication in maritime contexts.

The International Maritime Organization (IMO) has developed the SMCP (Seaspeak combined with Standard Maritime Navigational Vocabulary - SMNV) which was adopted at the 22nd Assembly in 2001 [4] as the global standard for all maritime communication. Given that English is recognized as the universal language at sea, Maritime English extends from the fundamental English vocabulary by incorporating distinctive phrases and terms designed to eliminate potential ambiguities. The primary functions of SMCP encompass three key areas: ship-to-ship communication, ship-to-shore communication, and internal communication onboard a ship [5]. The scope of the IMO SMCP is more focused on specific communication phrases and terms within the maritime domain, rather than providing an exhaustive curriculum for the broader range of language proficiencies required in maritime communication. It is important to emphasize that the IMO SMCP does not aim to offer a comprehensive maritime English syllabus, which is expected to cover a much broader spectrum of language skills to be achieved in the fields of vocabulary, grammar, discourse abilities, and other skills than the IMO SMCP could ever manage. The SMCP's further communicative features encompass avoiding synonyms and contracted forms. It also involves providing fully worded answers to "yes/no"-questions and basic alternative answers to sentence questions, providing one phrase for one event, and structuring corresponding phrases after the principle "identical invariable plus variable" [4].

Proficiency in Maritime English extends to understanding the basic operations of vessels and ship terminologies (vocabulary), the knowledge of English language structures (grammar, including typographical conventions) as well as discourse competence, pragmatic competence (the usage of proper language function forms, speech acts, register), and communication strategies. Proficiency further involves fluency and the ability to recognize and appropriately use nonverbal signs.

The basic marine vocabulary involves various aspects such as ship parts and types, the names and functions of equipment on board and at ports, ship organization, ship movement and directions, routine operations on board such as bunkering, alongside, maintenance, cargo loading and unloading, watch-keeping, etc., duties and responsibilities onboard, and basic ship communication in English. Vocabulary needed for maritime operations also includes positions, bearings, courses, speed, distances, times,

and geographical names. In Maritime English, the grammatical structures necessary to be employed include basic English tenses, sentence structure, basic morphology, and specific orthography and phonology. Orthography and phonology include typographical conventions, the specific spelling of letters (e.g. Alpha, Bravo, Charlie, Delta, etc.), and pronunciation of numbers (/zeero/, /wun/, /too/, /tree/, etc.).

Discourse/textual abilities and skills to put the phrases in appropriate functional language use in Maritime English also refer to both SMPC internal (onboard) and external communication phrases and processes [4]. **Onboard communication phrases** involve a wide variety of phrases regarding the following: standard wheel and engine orders, pilot on the bridge (propulsion systems, maneuvering, radar, anchoring and leaving the anchorage, tug assistance, berthing and unberthing). Further on-board safety-related phrases may meet other basic on-board communication requirement and be useful for Maritime English instruction: operative ship handling such as handling over the watch (briefing on position, movement and draft; briefing on traffic situation in the area; briefing on navigational aids and equipment status; briefing on radio communication; briefing on meteorological conditions, temperatures, pressures and soundings; briefing on main engine and auxiliary equipment, etc.), safety on board (raising alarm, briefing crew and passengers, checking status of escape routes and lifeboats/liferafts, ordering evacuation and abandon vessel, occupational safety, fire protection and firefighting, damage control, grounding, and search and rescue on-board activities), cargo and cargo handling (loading and unloading, handling dangerous goods, handling liquid goods, bunker and ballast pollution prevention, preparation for sea, cargo care), passenger care (briefing and instruction of prohibited areas, on safety regulations, preventive measures and communication, evacuation procedures, boat drills, attending the passengers in emergency). **External communication phrases** refer to ship-to-shore communication and vice versa, and ship-to-ship communication. The usage of these phrases employs collocutors' functional and strategic competence, fluency, and nonverbal communication ability. These phrases refer to the following: distress traffic including distress communication (fire, explosion, flooding, collision, grounding, danger of capsizing, sinking, piracy, abandoning vessel, person overboard), search and rescue communication, and requesting medical assistance; then urgency traffic, safety communication which refers to meteorological and hydrological conditions, navigational warnings, environmental protection communication, pilotage, helicopter and ice-breaking operations, VTS (Vessel Traffic Service) standard phrases (IMO VTS Guidelines recommend that in any message directed to a vessel it should be clear whether the message

contains information, advice, warning, or instruction; other message markers involve question, answer, request, intention). They also include providing responses to "Yes/No" questions and making announcements related to distress messages (DSC Distress Alert - MAYDAY), urgency messages (DSC Urgency Call - PAN PAN), and safety messages (DSC Safety Call - SÉCURITÉ). Nonverbal communication in Maritime English refers to the seafarers' ability to recognize sound signals (e.g. in fog, when overtaking), day shapes, light recognition at night (e.g. pilot vessel at anchor, pilot vessel underway, vessel aground, vessel not under command, etc.), types of buoys (general and cardinal marks), radar, and navigational equipment, and adjust their operations accordingly.

2.2. Maritime English assessment solutions

The use of the IMO SCMP and English language in written and oral form constitutes a fundamental component of the IMO Standards of Training, Certification, and Watchkeeping (STCW) [5]. The means of demonstrating competence involves the examination and assessment of evidence obtained from practical instruction with clearly stated criteria - the communications are clear and understood.

Some notable testing solutions in Maritime English include Marlins English language tests [1], the MarTEL [2], and the International Maritime English Testing System (IMETS)[3].

The Marlins test online for seafarers [1] is designed to assess English language proficiency and specialized terminology essential for safe and efficient operations on maritime vessels. The assessment, lasting 60 minutes upon launching the simulator, includes various aspects such as grammar (involving multiple choice questions on basic grammar categories), vocabulary (choosing the correct term based on the image presented), pronunciation, time and numbers (using compound numbers based on what is heard in the recording), as well as reading (involving gap-filling and multiple choice technique) and listening skills. Each question category is complemented by visual images, audio recordings with dialogues, or interactive practices, fostering engagement throughout the testing process. The questions are tailored to the industry context, making this format suitable for all ranks and positions. The results are scored out of 100 but not subject to interpretation. It is at the crewing agencies' discretion to decide what MARLINS score they consider suitable for their ranks and ratings. The test of spoken English is distinctively shipping-oriented but does not test subject knowledge. It is conducted as an interview using visual prompts to elicit natural spoken English. The interlocutor evaluates proficiency at three levels - elementary, lower, and upper intermediate focusing on spo-

ken fluency, spoken accuracy, and listening comprehension. The tasks involve the description of job routine procedures, comparison, and discussion eventually leading to clarifying points and supporting opinions [6].

On the other hand, the MarTEL test [2] aims to provide an online learning and assessment platform with three different levels or standards: 1) foundation - encompassing elementary, intermediate, and advanced proficiency; 2) officer - deck and engineering; and 3) senior officers - deck and engineering as well as senior officers at ports and pilots. The test emphasizes active learning, focusing on maritime terminology and usage with less emphasis on grammar. It assesses key English language knowledge and skills - grammar, vocabulary, reading, writing, listening, and, to a lesser extent, speaking. The computer-based proficiency test consists of 100 randomly selected multiple-choice questions, accessible through internet applications.

In a nutshell, these tests use predominantly the multiple choice technique and visuals, such as drawings, pictures, and photos; they focus on listening and reading comprehension mostly with vocabulary, grammar, and phonology while speaking and writing are somewhat underrated; they are unclear on score interpretation - this stems from the lack of standards for ME proficiency. Problems relating to ME competence were addressed by two working groups: the MARTEL project - to rely on well-known testing standards such as TOEFL and IELTS more in terms of testing methods rather than content; and the second approach offers an entirely new yardstick of English language competence for ship officers [7] and proposes a standard instrument to identify the ME communication performance. However, there are no specific tasks mentioned, and the development of four language skills is ascribed to levels (bands) 7 and 8 [7]. What follows from descriptors is that the yardstick should be refined adding rating scales for each skill.

The assessment solution designed to assess a seafarer's overall oral communicative proficiency is IMETS [3]. It is conducted in the form of a one-to-one interview between the candidate and the examiner. The test comprises four sections (interview on maritime training and work background, presentation on a given topic, listening comprehension, and diagnosis of the problem, picture description and discussion) lasting about 25 minutes. A proficiency score of 1-9 (from non-operational to management advanced) is awarded based on pronunciation, resource, coherence, and task response. There are specific tasks mentioned and speaking language skills are evaluated via a 9-level descriptor tool. However, the descriptors are designed as general tendencies, thus refining of descriptors is needed. Moreover, it is important to emphasize that the instrument empirical base

consists of judgments of the examiners and is not based on empirical evidence taken from ME (as a foreign language) learners' data.

The following subsection explores the English language competences in detail, focusing on speaking skills and oral communication and introducing the model of communicative language ability.

2.3. Communicative language ability: theoretical framework

The study introduces the concept of communicative language ability which is rooted in the communicative language ability model established by Bachman [8] and the Common European Framework of Reference for Languages [9]. These two models evolved from the concepts of communicative competence that originated in the 1970s through anthropology and sociolinguistics research [10]. The concept further evolved in the 1980s with the contributions from Canale and Swain [11], and Savignon [12], and the incorporation of fluency as a valuable component into the model by Faerch et al. [13].

Communicative language ability, as outlined in [8], encompasses three key components:

(1) linguistic competence:

- organization elements: this includes *grammatical competence* (knowledge of vocabulary, morphology, syntax, phonology/graphology) and *textual competence* (cohesion and rhetoric organization); and
- pragmatic elements: *illocutionary competence* (proper usage of speech acts and functions of ideation, manipulation, heuristic, and rhetoric functions) and *sociolinguistic competence* (sensitivity to differences in dialects, registers, sensitivity to naturalness, ability to interpret cultural references);

(2) strategic competence, which relates to the interaction of a series of metacognitive components such as goal setting, assessment, and planning; and

(3) psycho-physiological mechanisms which involve neurological and psychological processes that engage visual and auditory communication channels, and receptive and productive means of communication; in receptive language use auditory and visual skills are employed while in productive use the neuromuscular skills (articulatory and digital) are used.

Another relevant model is a model of communicative language usage within the Common European Framework of Reference for Languages: Learning, teaching, assessment [9]. This model focuses on communicative language usage, encompassing three segments:

(1) communicative language competence refers to three basic components:

- linguistic competence, equivalent to Bachman's grammatical competence;
- sociolinguistic competence, corresponding to Bachman's sociolinguistic competence; and
- pragmatic competence consisting of
 - (a) discourse competence, equivalent to Bachman's textual competence; and
 - (b) functional competence, encompassing language macrofunctions (e.g. description, commentary, narration, explanation, or instruction), microfunctions (e.g. seeking information, socializing, structuring discourse), and an element of planning competence which involves message sequencing according to interactional and transactional schemes. Two qualitative factors influencing the functional success of the learner/language user are fluency (the ability to articulate and keep going in challenging situations) and propositional precision (the ability to formulate thoughts clearly).

(2) strategic competence involves the application of communicative strategies, which can be considered as the application of the metacognitive principles of pre-planning, execution, monitoring, and the repair action across various types of communication activities (e.g. reception, interaction, production, mediation); and

(3) nonverbal communication is the process of transmitting and receiving messages without words, utilizing finger pointing, eye direction, paralinguistic elements (e.g. gestures, facial expressions, body posture, eye contact, proxemics), nonlinguistic elements (extralinguistic speech sounds like 'sh' for requesting silence or 'ugh' for expressing disgust), or prosodic elements such as pitch, stress, and intonation.

In the examination of how a foreign/second language can effectively convey diverse meanings in different academic and social settings, this study adopts a multicomponent model of communicative language ability. Drawing insights from the work of various researchers [8], [9],[10], [11], [12], the eclectic model of communicative language ability comprises the following components: grammatical competence, textual competence, functional competence, sociolinguistic competence, strategic competence, fluency, and nonverbal communicative ability. This model serves as the foundation for conceptualizing and designing an assessment instrument tailored to measure FL learners' speaking ability in an oral production task. The instrument is designed not only for general English but also for specific domains of English for specific purposes, including Maritime English.

3. Methods

The goal of the study is not only to analyze the concept of communicative language ability within the context of Maritime English but also to present, describe, and analyze the instrument specifically designed for assessing communicative language ability in Maritime English through oral communication tasks.

The developed instrument termed the Communicative Language Ability Scale (CLAS) serves the purpose of gauging language users' communicative language ability, both as an overall composite and with a focus on individual competences. It is intended for distribution to external examiners who will assess the language users' level of communicative language ability in conjunction with specific communication tasks or situations.

The study employs descriptive and analytical methods, with a particular focus on scrutinizing the metric characteristics of the CLAS instrument. To process the data, the measures of internal consistency and reliability (Cronbach's alpha) and interclass correlation (inter-rater reliability coefficient) are used. Statistical analyses of the instrument raw scores encompass descriptive statistics (frequency analysis, mean values, standard deviation), analysis of variance (ANOVA, MANOVA), correlation analysis, regression analysis, modelling. The data obtained during the instrument testing phase are analyzed using SPSS Package for Windows.

4. Results

The CLAS instrument is constructed based on various measuring solutions tailored for individual competences by different authors [8], [9], [14], [15].

The 5-point multi-trait scale is intended for the external evaluation of learners' overall speaking ability and for providing insights into specific CLA competences: grammatical competence, textual competence, functional competence, sociolinguistic competence, strategic competence, fluency, and nonverbal communicative ability (Table 1). The subscales are created to measure each competence. As the sources [8], [9], [14], [15] for the subscale are not originally all 5-point scales (some are 3-point, others are 4-point, 5-point, or 6-point scales), they are modified so that each subscale is 5-level sub-instrument which is suitable for statistical data processing and analysis as well as for the comparison with the other potential empirical data obtained by using other instruments (5-Likert types). The comparison of CLAS with the subscales on which the instrument is based is beyond the scope of this paper.

The scale comprises qualitative descriptors indicating the proficiency level for each measured competence, utilizing a 5-point range from 1-5: the low end indicates a low level and the high end indicates a high level of the assessed competences. At the low end (value 1), there is an absence of systematic evidence for morphology and syntactic structures; the presence of most possible types of errors, an extremely limited vocabulary (a few words or phrases), not possible to discuss any topic; incoherent speech, lack of cohesion; there is no indication of an ability to choose an appropriate language form to perform a particular language function; there is evidence of only one register, no evidence of ability to use cultural references and to adjust speech to the context and collocutors; no evidence of ability to use communication strategies, inability to convey ideas; the speaker needs constant support to carry on with the conversation; wrong pronunciation (very difficult to understand) and disrupted speech hindering communication.

Conversely, at the high end (the value 5), the scale indicates a complete range of morphologic and syntactic structures with no systematic errors, an extensive vocabulary, the speaker rarely searches for words and almost always uses appropriate words; coherent and well-organized speech using a variety of appropriate cohesive devices, rarely confusing relationships among ideas, the appropriate performance of language functions with the ability to use an adequate language form to perform a particular language function; control of both formal and informal register, mastery of cultural references, ability to adjust speech to context and collocutors; full control of communication strategies, the speaker is able to initiate and sustain a conversation, appropriate reactions to changes in conversational turns, and flawless pronunciation with adequate stress and intonation, and no interrupted speech. Table 1 presents the CLAS instrument [16].

Table 1 – Scale of communicative language ability - Speaking ability.

Rating	Communicative language ability - descriptors
5	<u>Grammatical competence</u> <ul style="list-style-type: none"> • Complete range of morphologic and syntactic structures, no systematic errors present; • Extensive vocabulary: the speaker rarely searches for words, almost always uses appropriate words;
	<u>Textual competence</u> <ul style="list-style-type: none"> • Excellent coherence and organization of speech; excellent cohesion – a variety of appropriate cohesive devices is used; • There are hardly ever confusing relationships among the ideas;
	<u>Functional competence</u> <ul style="list-style-type: none"> • Language functions are performed appropriately (ideation, manipulation, rhetoric) – the speaker is able to use an adequate language form to perform a particular language function;
	<u>Sociolinguistic competence</u> <ul style="list-style-type: none"> • Control of both formal and informal register, full control of cultural references, ability to adjust speech to context and collocutors, • No non-native but grammatical structures, the speaker is highly able to adjust speech to context and collocutors;
	<u>Strategic competence</u> <ul style="list-style-type: none"> • The speaker is able to initiate and carry on with the conversation, react appropriately according to the change of conversational turns, to utilize language competences to assess the context for relevant information; • Full control of communication strategies (no compensatory strategies present);
	<u>Fluency</u> <ul style="list-style-type: none"> • No errors in pronunciation, adequate stress and intonation present, no interrupted speech;
	<u>Nonverbal communicative ability</u> <ul style="list-style-type: none"> • Frequency and use of head nods and change in gaze direction acceptable by norms of native speakers; • No linguistic problems that require gestures for compensation;
4	<u>Grammatical competence</u> <ul style="list-style-type: none"> • Large range of morphologic and syntactic structures, control of most structures, with few error types; • Large vocabulary – seldom misses or searches for words; few lexical errors, which do not impede communication;
	<u>Textual competence</u> <ul style="list-style-type: none"> • Speech usually well organized, good cohesion – relationships between the utterances well marked, sometimes mistakes in use of cohesive tools;

Table 1 – Scale of communicative language ability - Speaking ability. Continued

4	<p><u>Functional competence</u></p> <ul style="list-style-type: none"> • Language functions are mostly performed appropriately (ideation, manipulation, rhetoric) – the speaker is often able to use an adequate language form to perform a particular language function;
	<p><u>Sociolinguistic competence</u></p> <ul style="list-style-type: none"> • Evidence of two registers and control of either formal or informal register, speaker often uses cultural references in an appropriate way, rare non-native but grammatical structures, the speaker usually aware of the context and able to adjust speech to collocutors;
	<p><u>Strategic competence</u></p> <ul style="list-style-type: none"> • The speaker is able to convey main ideas in different contexts, able to carry out speech/conversation, sometimes has problems reacting according to the change of conversational turns, often to utilize language competences to assess the context for relevant information, the speaker rarely needs support to carry on with the conversation;
	<p><u>Fluency</u></p> <ul style="list-style-type: none"> • Speech rarely hesitant or interrupted, wrong pronunciation rare, which does not disturb communication, rarely wrong accent and stress;
	<p><u>Nonverbal communicative ability</u></p> <ul style="list-style-type: none"> • Frequency of head nods and change of gaze direction toward the audience approaches native speaker norms, few inappropriate uses of head nods and changes in gaze direction, few linguistic problems require gestures for compensation;
3	<p><u>Grammatical competence</u></p> <ul style="list-style-type: none"> • Large, but not complete, range of morphologic and syntactic structures, control of some structures but with many error types; • Vocabulary of moderate size – the speaker frequently misses or searches for words;
	<p><u>Textual competence</u></p> <ul style="list-style-type: none"> • Speech sometimes non-organized and confusing, moderate cohesion and simple cohesion tools present, relationships between the utterances generally marked, frequent confusing relationships among the ideas; speech lacks details and developing ideas;
	<p><u>Functional competence</u></p> <ul style="list-style-type: none"> • Language functions are sometimes performed appropriately (ideation, manipulation, rhetoric) – the speaker is sometimes unable to use an adequate language form to perform a particular language function;
	<p><u>Sociolinguistic competence</u></p> <ul style="list-style-type: none"> • Evidence of two registers though the use is inadequate, some evidence of ability to use cultural references, the speaker is usually able to adjust speech to context and collocutors, speaker sometimes uses non-native but grammatical structures;

Table 1 – Scale of communicative language ability - Speaking ability. Continued

3	<p><u>Strategic competence</u></p> <ul style="list-style-type: none"> The speaker is able to convey main ideas, there are some problems in carrying out speech/conversation, able to react according to the change of conversational turns but with problems, the speaker does not need support all the time to carry on with the conversation, use communication strategies to correct mistakes present in speech;
	<p><u>Fluency</u></p> <ul style="list-style-type: none"> Sometimes wrong pronunciation, speech is sometimes hesitant or interrupted;
	<p><u>Nonverbal communicative ability</u></p> <ul style="list-style-type: none"> Frequent and inappropriate head nods and changes in gaze direction toward the audience, the speaker sometimes uses gestures to solve linguistic problems but it is frequently inappropriate;
2	<p><u>Grammatical competence</u></p> <ul style="list-style-type: none"> Limited range of morphologic and syntactic structures, control of some structures but with many error types; Small vocabulary – difficulty in producing speech because of vocabulary limitations; frequent inappropriate choice of words;
	<p><u>Textual competence</u></p> <ul style="list-style-type: none"> Speech frequently non-organized, very little cohesion present in the speech, relationships between the utterances not adequately marked, frequent confusing relationships among the ideas;
	<p><u>Functional competence</u></p> <ul style="list-style-type: none"> Language functions are performed inappropriately (ideation, manipulation, rhetoric) – the speaker lacks the ability to choose an adequate language form to perform a particular language function in a particular situation;
	<p><u>Sociolinguistic competence</u></p> <ul style="list-style-type: none"> Evidence of only one register, almost no evidence of ability to use cultural references, the speaker is rarely able to adjust speech to context and collocutors, frequent non-native but grammatical structures;
	<p><u>Strategic competence</u></p> <ul style="list-style-type: none"> The speaker is able to convey main ideas but in a limited context, very difficult to carry on speech/conversation, very rarely able to react according to the change of conversational turns, the speaker needs support all the time to carry on with the conversation, some evidence of ability to use communication strategies to correct mistakes;
	<p><u>Fluency</u></p> <ul style="list-style-type: none"> Very often wrong pronunciation, wrong accent and stress, speech is interrupted;
	<p><u>Nonverbal communicative ability</u></p> <p>Limited and inappropriate head nods and changes in gaze direction toward the audience, limited and inappropriate use of gestures to solve linguistic problems;</p>

Table 1 – Scale of communicative language ability - Speaking ability. Continued

1	<p><u>Grammatical competence</u></p> <ul style="list-style-type: none"> • No systematic evidence of morphologic and syntactic structure; errors of all types; • Extremely limited vocabulary; a few words or phrases, not possible to discuss any topic;
	<p><u>Textual competence</u></p> <ul style="list-style-type: none"> • Non-coherent speech, absence of cohesion (utterances completely disjointed or discourse too short to judge);
	<p><u>Functional competence</u></p> <ul style="list-style-type: none"> • No indication of the ability to choose an appropriate language form to perform a particular language function;
	<p><u>Sociolinguistic competence</u></p> <ul style="list-style-type: none"> • Evidence of only one register, no evidence of ability to use cultural references and to adjust speech to context and collocutors;
	<p><u>Strategic competence</u></p> <ul style="list-style-type: none"> • Inability to convey ideas, no evidence of the ability to use communication strategies to correct mistakes, the speaker needs support all the time to carry on with the conversation;
	<p><u>Fluency</u></p> <ul style="list-style-type: none"> • Wrong pronunciation (very difficult to understand) and interrupted speech that disturbs communication;
	<p><u>Nonverbal communicative ability</u></p> <ul style="list-style-type: none"> • Extremely limited and inappropriate changes of gaze direction toward the audience and collocutors, no evidence of gestures to enhance and support speech and meaning.

The CLAS instrument is designed for use as the assessment tool in Maritime English, employed by external evaluators/examiners who assess the speaking ability of English as a foreign language (EFL) users. Before assessing the speaking ability of ME users, the external evaluators/examiners (who are not the instrument developers) are to undergo instruction on how to use the CLAS instrument. The instruction involves the following: the explanation of the term communicative language ability and its components, a detailed description of the individual competences and descriptors in the instrument, and practical application of the CLAS instrument in a pilot assessment (on a smaller sample with a smaller number of participants).

Ratings range from 1 to 5, with each value associated with descriptors for each component of communicative language competence, as illustrated in Table 1. Communicative language ability scores are calculated as the cumulative factor consisting of seven competences which are presented in Table 1.

To interpret the mean values of a speaker's communicative language ability and competences, the following key is provided: mean values from 4.5 to 5.0 indicate advanced level, from 3.5 to 4.49 indicate upper-intermediate level, from 2.5 to 3.49 indicate intermediate level, from 1.5 to 2.49 indicate lower-intermediate level, and values of $M \leq 1.49$ indicate beginner level. The psychometric score ranges are determined according to criterion model for language user achievement levels.

In recent research conducted [16], the inter-rater reliability coefficient, determined through interclass correlation analysis (ICC), was found to be $r=0.81$. This outcome indicates that the external evaluation conducted thus far is considered reliable, with the inter-rater reliability coefficient being highly significant ($p < 0.01$, $p = 0.000$). Additionally, the overall internal reliability of the instrument was assessed, yielding a Cronbach's alpha coefficient with a value of $\alpha = 0.87$. This result suggests that the Communicative Language Ability Scale (CLAS) is a reliable and internally consistent assessment tool. Validation studies indicate that the construct of communicative language ability is complex: it can influence the EFL learners' use of speaking strategies [16] and can be affected by various EFL/ESP teaching programs [17] as well as by teaching/learning environment (blended vs. face-to-face) [18].

The CLAS instrument may be employed in assessing seafarers' speaking ability in various tasks requiring oral communication onboard, ship-to-ship, and ship-to-shore (explored in section 2), focusing on general communicative ability and specific individual language competences. To assess ME proficiency, it is wise to adapt nonverbal communicative ability descriptors and adjust them to comply with nonverbal communication context (onboard and external) in maritime operations (knowledge and usage of sound signals, lights, day shapes, types of buoys, radar navigational plotter), including nonverbal face-to-face communication among the ship crew.

Simulations and role-plays of actual communicative maritime activities are to be included in both ME language instruction and assessment. These activities may involve DISTRESS situations (Man on Board, piracy, capsizing), undocking maneuver, simulating fire drill of the crew, safety communication messages (from ship-to-ship or ship-to-shore), anchoring at a port of destination, or similar [19]. This can be challenging, both financially and organizationally as it would require instruction and assessment on a boat as well as a team of examiners.

5. Conclusion

Three different aspects of ME have been identified and explored in the paper: the complexity of needed seafarers' skills, ME language proficiency assessment models, and seafarers' communicative language ability. The study presented in this paper suggested the application of the CLAS instrument in the evaluation of seafarers' language skills (with a focus on oral communicative language use) both in the ME instructional setting and in seafarers' professional maritime operations.

The instrument was explained and analyzed, and the key for interpreting the scores was provided. The results obtained by statistical analysis showed that the CLAS is a reliable and internally consistent tool for evaluating communicative language ability. The CLAS design is rooted in the model of communicative language ability/communicative language use, implicitly guiding the development of ME instructions for upcoming seafarers with a focus on enhancing their ME proficiency.

The paper suggests the assessment of oral skills through dynamic activities such as simulations/role-plays of actual maritime operations by a content and a language expert. The issue is on the logistics. This type of approach requires simulators where the classes and assessments (for pre-service and in-service instruction and assessment) can be conducted. As for other requirements, the ME instructors themselves are to be not only well-versed in the technical language but also the technical content due to the high technical content nature of ME.

There is a limitation to the paper that could be addressed in further research. So far, the students' proficiency/communicative language ability which was assessed via the CLAS instrument has not been assessed via other standardized instruments measuring EFL proficiency. The application of another instrument (e.g., CEFR descriptors) together with the CLAS would give further insights into the nature of the EFL users' proficiency levels, bearing in mind the differences between the measuring tools: the CLAS tool as a quantitative-qualitative instrument collects numerical data while CEFR is a quantitative-qualitative descriptor instrument; while the CLAS instrument psychometrics is based on empirical research [16], [17], the CEFR is not based on empirical evidence taken from L2 learners data[20].

Research-wise, future studies could investigate the application of the CLAS tool with students-future seafarers and in-service seafarers in various maritime communication/operation contexts. Additionally, other potential factors affecting the ME communicative language ability in maritime emer-

gency situations (such as affective factors) could also be avenues for further research.

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