



The UN's 2030 Agenda for sustainable development and the maritime transport domain: the role and challenges of IMO and its stakeholders through a grounded theory perspective

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Abstract In September 2015, the United Nations (UN) officially adopted the 2030 Agenda for Sustainable Development together with 17 sustainable development goals (SDGs) (UN, 2016). The attainment of the SDGs requires a strong commitment by all UN Member States, not least by the Member States at the International Maritime Organization (IMO). This empirical research aims to identify the role and challenges of stakeholders at IMO, when implementing the UN's 2030 Agenda in the international maritime transport domain using a grounded theory approach. This paper describes the methodology and the analytical process undertaken and presents the main findings based on empirical data. The results are presented as a set of six propositions. The first proposition presents the phenomena engulfing Member States at IMO stemming out from lack of knowledge and policy incoherency on the 2030 Agenda at national level. The other five propositions suggest how these challenges could potentially be best alleviated through an IMO-led strategy on sustainable development within the context of the 2030 Agenda, supported by an appropriate governance structure that sees the introduction of strategic actors for coordinating the implementation of the SDGs at national level. With the support of a Task Force, and by also making use of the IMO Member State Audit Scheme (IMSAS), to create more awareness and ownership, the strategic actors could work towards balancing the three dimensions of sustainable development—the economic, the environmental, and the social dimensions—which were found to be imbalanced in the international maritime transport domain.

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1 Introduction

According to the United Nations Conference on Trade and Development (UNCTAD), around 80% of global trade by volume and over 70% of global trade by value is carried by sea and is handled by ports worldwide. In developing countries, these percentages can be even higher. In 2015, world seaborne trade volumes were estimated to have surpassed 10 billion tons (UNCTAD 2016). Shipping is by far the most cost-effective and efficient mode of international transportation of raw material, manufactured goods, and other essential cargo (IMO 2017a). Therefore, shipping needs to remain sustainable—hence, sustainable development is paramount to international shipping, insofar as it has a great global impact. It is here where the United Nations’ newly adopted Development Agenda “Transforming our World: The 2030 Agenda for Sustainable Development” and the 17 sustainable development goals (SDGs) fully come to play. While the SDGs neither refer directly to transport nor to maritime transport, the UN Interagency Expert Group on Sustainable Development Goal Indicators, considers shipping as a critical factor for the effective realization of eight goals and 11 targets, both directly and indirectly (UNCTAD 2016). So, the sustainable development of maritime transport raises major challenges not only for the sector but also in terms of global governance.

1.1 IMO as the global standard-setting authority for the maritime transport industry

The International Maritime Organization (IMO)¹, as the global standard-setting authority for the safety, security, and environmental performance of international shipping, has an important role to play in the attainment of the SDGs because it can create a more effective regulatory framework for the maritime transport industry (IMO 2017c). As stated by the IMO Secretariat during the last Assembly, “IMO is fully committed to achieving the 2030 Agenda and the SDGs, including aligning its programmes and initiatives to support Member States” (IMO (2017j, annex 1, p. 4). Therefore, IMO has the responsibility to play a full and active role in achieving the 2030 Agenda and the SDGs and to provide support to its Member States through, inter alia, policy advice, and technical cooperation, particularly when implementing the SDGs within Member States’ national setup through their respective national sustainable development strategies.

1.2 A problem that needs to be addressed

Similar to what has happened with the Millennium Development Goals (MDGs), the United Nations’ 2030 Agenda for Sustainable Development could also become an integral part of the work of IMO (IMO 2017j, annex 1, p. 4), not only in terms of

¹ (<http://www.imo.org/en/Pages/Default.aspx>).

technical cooperation but also across all other sectors that IMO caters for through its organs (IMO 2015). However, in order to do so, as the findings of this study based on empirical data will suggest, the main challenge that the 2030 Agenda poses to the IMO must be addressed, i.e., Member States must be more rigorously engaged and committed in coming forward with proposals on how IMO could achieve the 2030 Agenda and the SDGs in a balanced and integrated manner when embracing the three dimensions of sustainable development (economic, social, and environmental) within the context of its programs and initiatives. Although discussions on how IMO could potentially contribute towards the fulfillment of the SDGs have started, particularly in the Technical Cooperation Committee (TCC), the present list of outputs for the 2018–2019 biennium of the Strategic Plan of IMO for the 6-year period 2018–2023 contain only two outputs related to SDGs listed under two Strategic Directions out of seven Strategic Directions in total (IMO 2017k). In respect of the implementation of the 2030 Development Agenda and the SDGs, IMO is almost 2 years behind other United Nations System bodies; the latter are far ahead of IMO in linking their work to the SDGs (IMO 2017d). As IMO mainly depends on the input that its Member States put forward for discussion and agreement, there are several reasons why IMO Member States have been slow in reacting to the 2030 Agenda within the context of the work that IMO does.

Based on grounded data and using a constructivist approach, this paper aims to provide answers on why this delay has happened which, in most cases, are far beyond the IMO's Secretariat remit. This paper is structured in two parts. The first part, which comprises Sections 1 and 2, discusses elements within the literature on sustainable development and provides an overview of the current state of play on the implementation of the 2030 Agenda at IMO. Subsequently, the second part, in Sections 3 to 5, explains the methodological model applied and the analytical framework used and presents the analysis of the main findings of the empirical research and concludes by presenting the propositions which also provide the basis for further research.

2 Literature review on sustainable development

Literature on the importance of sustainable development for the international maritime transport domain is limited and much less on what the stakeholders, particularly those involved at policy decision making at IMO and at national levels, are doing in this respect. The essence of the 2030 Agenda is primarily based on sustainable development and there seems to be a clear understanding among researchers that both strategy and governance play a critical role in facilitating and putting in place a sustainable development program, particularly from a political commitment point of view (Jordan and Lenschow 2008; Lafferty 2004; UN 2016). Sustainable development seeks to balance the needs of the current generation with those of the future; the concept is essentially about the integration of a short-term and long-term timescales in policy making (Lafferty 2004). Swanson et al. (2004) suggest that despite the progress made, nations are only at the early stages of learning towards effective strategic and coordinated action for sustainable development, particularly at a global level. On the implementation of sustainable development, Rist (2008) submits that the big question is “how?” This question applies also very squarely to the international maritime transport

domain. The stakeholders should agree on what needs to be done concretely to narrow down any identified gaps by setting clear SDG-related outputs in the IMO's Strategic Plan.

Turning on governance, Lafferty (2004) concluded that sustainable development faces clear challenges often inherent in the complexity of the concept. Jordan (2008) shares the same view and suggests that sustainable development does not just “happen” in an automatic or preordained way. Kemp and Parto (2005) describe governance as the process of decision making and the process by which decisions are implemented. They claim that the most significant challenge related to governance for sustainable development is to ensure that multi-player governance regimes embody capacity for sustainability-oriented coordination, direction, and re-direction. Adams and Luchsinger (2017) stated that the implementation of the 2030 Agenda is not just a matter of having better efficiency and effectiveness but is more on how the UN development system can meet the high demands of new commitments aimed at transforming the course of development with a view to be equitable and sustainable. In order to effectively implement a sustainable development policy, it would be desirable to have strong political commitments as Member States have the tendency to engage in a rather unstructured way in adopting and dropping administrative instruments. If aspects of sustainable development are not part of the mindset of leaders and members of the organization, it would affect the efficiency of the core business and its objectives would not be attained (Baumgartner 2009). Broadly speaking, it is a challenge for the maritime policy makers to adopt innovative government approaches in pursuit of sustainable development at national level and at international level.

2.1 Taking stock—what has been done so far at IMO on sustainability

The issues that have been raised in the preceding section could potentially be critical for policy makers representing their Member States at IMO when dealing with sustainable development matters. IMO, mainly as a Secretariat, was instrumental in proposing the concept for Sustainable Maritime Transport System (SMTS) in 2013 in a rather comprehensive way (IMO 2013a).² SMTS, as a concept, listed a number of imperatives or overall goals that IMO Member States particularly policy makers directly involved in shipping and maritime industries must aspire to in order to establish such a system. One of the three aims of SMTS was “to identify the various ‘imperatives’ or goals that must be met to implement a SMTS, and the activities that will need to be undertaken to achieve them—possibly requiring actions by the relevant bodies and the various maritime stakeholders. It should be borne in mind that the goals are not to be conceived as measurable results, but rather an expression of a desirable state” IMO (2013b, p. 5). Despite the effort that was made by the IMO Secretariat in coming up with the SMTS concept, the IMO's stakeholders were not so forthcoming in determining what should be done in concrete terms to meet the “imperatives” or “goals” as outlined by the SMTS concept. Through the SMTS, Member States could have championed sustainability and could have laid down the path towards putting measures in place to have

² The SMTS was launched on September 26, 2013 by IMO during a special 1-day symposium it hosted on a Sustainable Maritime Transportation System—it was the 36th celebration of World Maritime Day and the theme was “Sustainable Development: IMO's contribution beyond Rio+20” (IMO 2013a).

sustainable shipping on international scale—thus serving as a stepping stone, a point of entry on sustainability, that could have facilitated the responsiveness and the engagement of IMO's stakeholders on the advent of the 2030 Agenda and the associated SDGs. Fast forward to 2015, the former IMO Secretary-General Koji Sekimizu welcomed the adoption of the 2030 Agenda by the UN, saying that IMO “stands ready to support the further development and implementation of the SDGs and I am confident that all IMO Member States will engage in discussions on how best to realize them, through IMO's work, particularly through the IMO Integrated Technical Cooperation Programme” (IMO 2015b). It is evidently clear that IMO, as a Secretariat, expected the Member States to engage themselves in seeing how best to realize the SDGs through the TCC. The important role that IMO has towards the achievement of the 2030 Agenda and the SDGs and how the international shipping and the maritime community contributes to sustainable development in relation to SDGs is highlighted by a brochure the IMO Secretariat published (IMO 2017l). In order to see how IMO's Member States reacted strategically towards the 2030 Agenda to concretely contribute to the SDGs, the following section focuses on IMO's Strategic Plan.

2.2 IMO's strategic plan for the period 2016 to 2021—IMO's attempt to include reference to the 2030 Agenda for sustainable development

Since much of the IMO's work hinges on its Strategic Plan,³ it was equally important for IMO to align its objectives and strategy with the 2030 Agenda (as most of the UN-specialized bodies had done prior to 2015). All United Nations system bodies were requested by the UN to align and link their work with the SDGs (IMO 2017d). This critical step did not really materialize at an early stage at IMO as its Member States did not react in good time. In order for IMO to achieve its vision and its objectives, it has a Strategic Plan covering a 6-year period and outputs (previously known as high-level action plan) spanning over a 2-year period (IMO 2017k). The IMO's Strategic Plan for 2016–2021 included 14 key Strategic Directions specifically formulated to enable IMO to achieve its mission objectives (IMO 2015c). While one would have expected that in 2015 the Member States of IMO would have aligned IMO's Strategic Directions (SD) with the UN's SDGs, in actual fact, it had only included a reference to SDGs in only two of its Strategic Direction, SD 1 and SD 3, and in one of the actions for SD 13. This meant that during 2016, none of the IMO Committees, bar for the TCC, were engaged towards working on the SDGs; only the TCC had the 2030 Agenda as a main agenda item under its wing (replacing the long-standing agenda item on the MDGs by the SDGs). During the TCC 66th session meeting in October 2016, the Committee discussed and agreed on how the TCC could link its technical assistance work, that of the Integrated Technical Cooperation Programme (ITCP) in particular, with the SDGs. Many concerns were raised by Member States as to how IMO is tackling the implementation of the SDGs, and this was reflected in the TCC report, “Many delegations observed that the linkage between the SDGs and IMO's Strategic Plan, Strategic Directions and High-level Action Plan should be identified first before linking them to the ITCP since the scope of the SDGs was much broader than the ITCP.

³ The IMO Assembly, which meets once every 2 years, and the member Governments adopt the Strategic Plan which contains key strategic directions that will enable IMO to achieve its mission objectives.

However, given that many other United Nations System bodies were far ahead of IMO in linking their work to the SDGs, some delegations noted the urgency in addressing this matter sooner rather than later” (IMO 2017d, p. 8), and “the rest of the United Nations System had already either linked their work with the SDGs or were rapidly progressing the related work” (IMO 2017d, p. 9).

The 67th session of the TCC, held in July 2017, worked to identify the linkages⁴ between IMO’s technical assistance work and the SDGs and drafted two Assembly Resolutions⁵ related to the 2030 Agenda and endorsed a draft Assembly Resolution on the guiding principles of IMO’s ITCP in support of the 2030 Agenda (IMO 2017e). Later, the Assembly Resolutions were adopted by the 30th session of the IMO Assembly IMO (2017k). Indeed, considerable amount of work on the 2030 Agenda had been carried out by the TCC as it was seen as the natural Committee to engage in the transition of the MDGs to SDGs. IMO was already active through the ITCP within which it supported Member States in activities related to MDGs. It remains to be seen, however, how and when the other four IMO Committees will engage on the 2030 Agenda.

2.3 IMO’s new strategic framework for 2018–2023—a more visible approach towards engaging with the 2030 Agenda

Of considerable importance was the outcome of IMO Council C117 held in December 2016, during which the new strategic framework for the 2018–2023 period was approved by the Member States forming part of the Council. With respect to the 2030 Agenda, the Council decided to include in the Vision Statement of IMO a direct reference to it and, as a result of this, the Vision Statement for the IMO for the period 2018–2023 reads:

- (1) “IMO will uphold its leadership role as the global regulator of shipping, promote greater recognition of the sector’s importance and enable the advancement of shipping, whilst addressing the challenges of continued developments in technology and world trade; and the need to meet the 2030 Agenda for Sustainable Development.”
- (2) “To achieve this, IMO will focus on review, development and implementation of and compliance with IMO instruments in its pursuit to proactively identify, analyse and address emerging issues and support Member States in their implementation of the 2030 Agenda for Sustainable Development” (IMO 2016, annex p. 1).

Apart from the Vision Statement, the Council also included in the overarching principles direct reference to the 2030 Agenda by emphasizing the important role IMO has to play in achieving the 2030 Agenda (IMO 2016). In addition, the approved new strategic framework for the 2018–2023 now contains seven SDs. Out of the seven

⁴ The most relevant SDGs were found to be SDGs 4, 5, 6, 7, 9, 13, 14, and 17 (IMO 2017e, p. 12).

⁵ Draft Assembly resolution “The linkages between IMO’s Technical Assistance work and the 2030 Agenda for Sustainable Development” and draft Assembly resolution “Guiding Principles of IMO’s Integrated Technical Cooperation Programme in support of the 2030 Agenda for Sustainable Development” (IMO 2017i, p. 8).

Strategic Directions, only SD 3 (respond to climate change) and SD 4 (engage in ocean governance) refer to the 2030 Agenda for Sustainable Development and the SDGs, respectively (IMO 2016). IMO, as a Secretariat, is doing its utmost to engage its Member States in coming forward with proposed actions. This can be seen by the efforts that the Secretary-General, Mr. Kitack Lim, is doing, particularly when addressing the Committees at IMO, in making IMO Member States more aware on IMO's goal of actively working towards the UN 2030 Agenda (Green4sea 2017). The outcome of the IMO Council C118, held in July 2017, has set the sails for IMO to start looking on how the linking of its own work with the SDGs can be done during biennial 2018–2019. The Council has approved the outputs for the 2018–2019 biennium,⁶ which were aligned to the new SDs of the Strategic Plan for 2018–2023 and has decided that it recognizes the fact that IMO “has yet to fully define and agree on a process to integrate the SDGs into its work” (IMO 2017f, p. 2). To this effect, it was decided that in this particular phase, the IMO Secretariat will not be asked to lead a process for developing additional performance indicators relating to IMO's work but to prepare a document containing the draft alignment of the SDs and outputs to the SDGs for its consideration at the next IMO Council (IMO 2017f). One has also to see how IMO's SDG role within the UN system will continue to evolve particularly within the Inter-agency and Expert Group on SDG indicators (IAEG-SDGs) which is tasked to develop and implement the global indicator framework for the SDGs and targets of the 2030 Agenda (UN 2017). While the UN has put a requirement for all UN system bodies to align and link their work with the SDGs (IMO 2017a), particularly because IMO has “obligations and responsibilities to implement through its standard-setting work and its technical cooperation activities, the aims and objectives of the SDGs and its targets, and of the need to mobilize the means required to support with concrete actions the realization of the 2030 Agenda, including the Addis Ababa Action Agenda” (IMO 2017k, annex 6, p. 1), apart from the TCC, none of the other IMO Committees have as yet taken specifically on board the 2030 Agenda to deliver concrete SDG-related outputs as a parent organ. Such undertaking has a dependency on how Member States respond to the transition of the SDGs into IMO's work and more so at national level. On this, it is important to point out that, since the 2030 Agenda consist of universal goals and targets, it encourages all Member States to ramp up their national responses towards the implementation of the 2030 Agenda (UN 2015). Notwithstanding the above obligations at national level, work at international level has started at IMO within the TCC.

3 Objectives of the research

In view of the previous analysis, the objectives of the research are the following: (1) to identify the challenges related to strategy and governance of IMO and its stakeholders within the context of the 2030 Agenda for Sustainable Development in the maritime

⁶ Out of 87 outputs to be delivered for the 2018–2019 biennium, there are only two outputs referring to the SDGs—under SD 4 (engage in ocean governance) output number 4.2 and under SD 5 (enhance global facilitation and security of internal trade) output number 5.5. Both have the TCC as the parent organ. Out of the 49 outputs related to other work (OW), there are none referring to the SDGs (IMO 2017h). Additionally, none of the Performance Indicators (42 in total) associated with the seven IMO SDs are linked to an SDG (IMO 2017g).

transport domain; (2) to determine if there is a need for an international strategic response for implementing the SDGs in the international maritime transport domain; and (3) to determine how best the IMO can strategically support its stakeholders in translating the 2030 Agenda into national policy.

3.1 Methodology

3.1.1 A grounded theory approach

The research methodology used in this study is based on a grounded theory approach. Grounded theory allows the use of all types of data when conducting the research and provides rich insights of organizational behavior and activities leading to the construction of reality that is grounded in data (Flick 2009). Grounded theory, as a general research methodology, is ontologically and epistemologically flexible as it provides the full package from data collection and analysis to the theoretical explanation of underlying patterns of social behavior (Holton and Walsh 2016). In the grounded theory approach, Glaser (1998) stated that all is data, with main qualitative methods being supported or enhanced with quantitative and observation data. Categories will emerge based on codes that will eventually form core concepts in the data to emerge until theoretical saturation is achieved, which allows for a model or a number of propositions to be established that are rigorously grounded in the data. Glaser and Strauss (1967) explain that grounded theory is a research method which provides the means to develop a theory that offers an explanation on the area of concern of the participants within the researcher's substantive area and further provides an explanation on how that concern is resolved or processed. Miles et al. (2014, p. 11) put forward that, "the strengths of qualitative data lie on naturally occurring, ordinary events in natural settings so that to have a strong handle on what real life is like." To be able to understand the complexity of implementing the 2030 Agenda and the SDGs in the international maritime transport domain, the authors chose IMO headquarters as the de facto natural setting for conducting the interviews with IMO's stakeholders. This helped the authors to further understand the role and challenges of IMO, as a specialized agency of the United Nations, and of its stakeholders in fulfilling the 2030 Agenda for Sustainable Development and the SDGs.

3.1.2 Method applied—a constructivist approach

As is normally done when using the constructivist approach in grounded theory, the authors of this paper conducted a literature review before they began collecting data and doing analysis. Such prior knowledge on issues related to sustainable development helped them to sensitize concepts within the context of the research method particularly for developing a deep understanding of the phenomena being investigated and issues associated to it when later analyzing empirical data to improve the groundedness of data (Bowen 2006; Charmaz 2001, 2006). When advocating grounded theory, Glaser (1998) also advised that before they embark on their research, researchers should do preliminary reading as this helps put the study into a context.

3.2 Research method: data collection and analytic rigor

Grounded theory allows researchers the freedom to use any data from any source, which is deemed to be useful, and by doing so, researchers can determine what is really going on (Holton and Walsh 2016). The quality and credibility of research start with the data and the depth and scope of the data make a difference (Charmaz 2006). For this research, the data were mainly primary but also secondary. Primary data were obtained from face-to-face, in-depth interviews with representatives attending IMO meetings over a period of 15 months and by observing ongoing debates at IMO Committees. All of this were done while using the grounded theory cycle of data collection during which, data collection, coding, conceptual abstraction of empirical data through constant comparative analysis, generation of concepts and categories, and elaboration of their properties and dimensions were carried out. The sampling strategy of the grounded theory cycle consisted of three waves of interviews, namely the convenience, purposeful and theoretical sampling (the latter aimed mainly to refine key categories). This led to theoretical saturation and theoretical integration. Figure 1 shows the process used in this research.

The analytic rigour was ensured through three stages of conceptual build up within the grounded theory cycle: the lower level of analytic rigour (stage 1), increased level of analytical rigour (stage 2), and the higher level of analytic rigour (stage 3) (see Fig. 1). Stage 1 was essential mainly for the identification of key interviewees that were versed with the ongoing discussions at IMO and who were also close to the shipping industry. Several face-to-face discussions took place with eight representatives of Member States at IMO. This was part of the first phase of the grounded theory cycle: the convenience sampling, which has helped in building preliminary concepts at a low level of rigour by means of sensing the environment surrounding the decision makers at IMO and to understand the political, economic, and social complexities in responding strategically

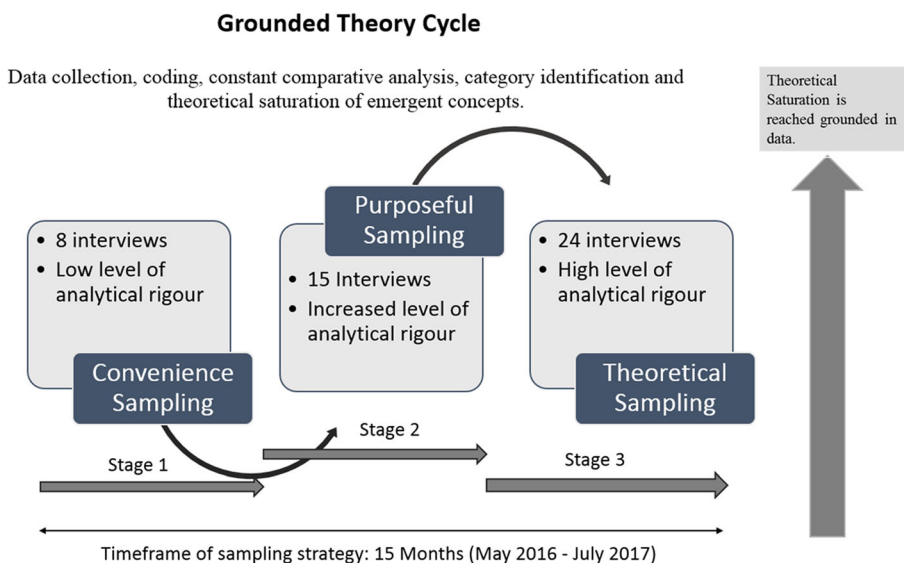


Fig. 1 The grounded theory process as applied to the research (self-designed)

towards implementing the 2030 Agenda. Stage 2 and stage 3 constituted of the remaining interviews, which were conducted during the two remaining cycles of the sampling strategy of grounded theory, namely the purposeful sampling (further elaboration of categories and sub-categories) during which 15 interviews were held, and the theoretical sampling (saturation of properties and dimensions of concepts) during which 24 interviews were held, bringing the total number of interviews to 47. Almost all of the face-to-face interviews were carried out at IMO, HQ in London during several field work sessions undertaken specifically for this research. Except for some cases, most of the interviews were all digitally taped and transcribed—the transcribed text generated more than 150,000 words of transcribed data.

3.2.1 *Secondary data*

Secondary data were acquired from the IMO's website, mainly the section that contains information on strategic and high-level action plans and trends, developments, and challenges for IMO's strategic framework. Numerous documents submitted to IMO meetings were reviewed; voluminous amounts of documents and sites held by the UN and other UN specialized agencies on matters related to the implementation of the 2030 Agenda and websites of administrations or entities of those that were interviewed were also reviewed. Our references largely show the use of these sources.

3.3 Data analysis as an iterative process—establishing the coding paradigm

Through the constructivist approach, the grounded theory allowed the authors to use their knowledge and experience and information gathered from literature review to analyze more in depth what was being noted and observed during the grounded theory cycle, while not being oblivious to other important elements and concepts that emerge, and therefore not being conditioned by what is already known. The data analysis was carried out until saturation was reached and no more properties and dimensions of categories emerged. The category schema that was developed was transposed into the conditional/consequential matrix, known as the “Conditional and Consequential Matrix” (Strauss and Corbin 1998, 2008), which consisted of three main features: contextual conditions, actions and reactions, and consequences or outcomes.

By virtue of this approach, the conditional/consequential matrix provided the platform for organizing and linking all concepts that explain the main concern in that particular area under study in a way of putting the analytic picture all together by keeping track of the complex relationships that emerged. Strauss and Corbin (2015, p. 158) highlight the importance of the matrix by emphasizing that the matrix “gives qualitative research its soul.” The matrix provided the means to have a better understanding of the process of action-interaction of individuals or countries in how they respond and interact to changes, depending on the prevailing situation as a result of the conditions and consequences.

3.4 Data management and the coding exercise

The MAX Qualitative Data Analysis (MAXQDA) software, particularly MAXQDA 2012, was used for data management, storage, and analysis. MAXQDA is one of a

range of qualitative data management tools that are designed for coding activities using four interactive screens as shown by Fig. 2. The coding exercise consisted of “dragging” text extracts from the transcribed interviews which were uploaded into the document system and displayed in the document browser of the code system’s category and sub-categories and their respective properties and dimensions which emerged from the empirical data during the analysis. The MAXQDA code matrix browser provided an excellent possibility of seeing the coding intensity, where a repetitive focus on particular categories and their sub-categories, properties and dimensions, was being placed.

The main areas of concentrations (high coding intensity) became immediately visible once the coding of each interview was completed. Figure 3 provides an example. It shows a screen shot from the MAXQDA code matrix browser, showing the level of coding intensity per interview against the schema under one of the main constructs of the coding paradigm: consequences/outcome—sub-category: bridging the gap. The intensity of coding across a large spectrum of interviews for the properties of establishing a sustainable development strategy, governance framework in place for all organs, and IMO leadership on SDGs/setting up a Task Force, is very visible.

4 Results and discussion

The main results of the empirical research based on 47 interviews are presented in this section. They are grouped under the three components of the *Conditional and Consequential Matrix* of Strauss and Corbin (1998). The Matrix, as an analytic tool, helped the authors to understand: the issues within the *Context* (i.e., the elements that form up

Fig. 2 A sample of the coding paradigm showing, the coding, the categories, sub-categories, and properties (part of the contextual conditions) in MAXQDA and the four interactive screens

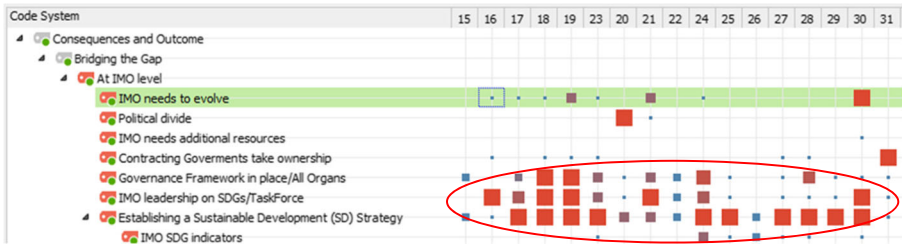


Fig. 3 Screen shot from the MAXQDA code matrix browser showing the level of coding intensity of the properties of particular sub-categories (bridging the gap) under Consequences/Outcomes

any situation and the interpretation given to them by the interviewees) that has a bearing on the *Conditions* (i.e., Member States must follow established IMO procedures) of the situation and the substantive area under study; the *Actions and Reactions* that takes place to attain the desired outcomes (i.e., how the Member States reacted at IMO towards the implementation of the 2030 Agenda); and the *Consequences and Outcomes* that follow as a result of the actions taken (i.e., alignment of IMO's Strategic Plan and concrete SDG-related outputs). The matrix provided the means for identifying the range of potential conditions of a given situation together within the consequences as a result from action-interaction (Strauss and Corbin 2015). As recommended by Glaser (2008), the authors let the data to “speak” and all data were treated as a one set under the matrix. Following a detailed coding exercise, based on constant comparison and conceptual abstraction of empirical data, the main findings that have emerged under the three main components of the matrix are described in this section. The findings capture and visualize the complex relationships for which the interviewees gave a detailed account on *context-actions-outcome* situations in dealing with the implementation of the 2030 Agenda at IMO and at national level. The following are the main constructs that emerged.

4.1 Contextual conditions—a need for galvanizing commitment towards sustainable development

The contextual conditions component is pivotal in understanding the context—the set of circumstances, within which the research study was conducted and the range of conditions that formed part of the issues/situations and the meaning given by the participants that were interviewed (Strauss and Corbin 2015).

The research found that, from a context point of view, the stakeholders at IMO, being the Members States, Intergovernmental Organizations (IGOs), and Non-Governmental Organizations (NGOs), have a central role to play to provide visibility of the SDGs within the shipping industry. An issue, which was apparent across the spectrum of the interviewees and which has an impact on the present conditions affecting the importance of shipping on international scale within the context of the 2030 Agenda, was that for the officials that have represented the national administrations or countries in the UN, when developing the SDGs, the maritime sector, precisely the shipping, was a very tiny element often not a priority at national level and which ended up being forgotten and not mentioned at all in the SDGs. So transport was not taken into consideration when the SDGs were being drafted and agreed upon at the UN.

The end result was that there is no particular SDG focusing solely to transport and yet transport is a major contributor to a number of SDGs. However, it emerged that the environmental aspect was predominately covered and well represented, which was indeed important, and was always high on the agenda of Member States. Nonetheless, maritime administrations were generally neither much consulted nor kept updated on how the 2030 Agenda could contribute towards shipping. Consequently, maritime administrations were finding it difficult to see how they could contribute towards achieving the SDGs and making the “shipping connection with SDGs” without clear directions from IMO. Similar issues were experienced by IGOs and NGOs as they were finding the entities within their domain were not much aware, if any, of the 2030 Agenda. It also became apparent that there was lack of knowledge and visibility on SDGs, often due to political and policy incoherency at national level. This was the main reason which conditioned most of the stakeholders attending IMO meetings in not being able to bring up the SDGs during their deliberations particularly between September 2015 and July 2017. This influenced IMO's working context in respect of the 2030 Agenda and to some extent, as a result, it had conditioned IMO in not having a clear SDG plan of action/outputs at the level of its Strategic Plan.

The research found that sustainable development is extremely important for maritime and shipping in particular not only because it provides the means for countries to continue developing and evolving their economy but also because shipping itself needs to remain sustainable in order to contribute towards sustainable development, hence the 2030 Agenda. One of the research findings indicated that the present international shipping conditions must be improved to better contribute towards the sustainable development of the world economy and more so for the developmental growth of each country. Participants in the research study claimed that this could be accomplished through more engagement by the international community, particularly the Member States attending IMO by taking a proactive approach in implementing the SDGs through concrete actions. One interviewee stated that shipping must remain sustainable because what “carries the freight needs to be sustainable.” When interviewing representatives of the industry, it became clearly visible that at some point, the industry could turn around and, as an interviewee put it, “can't make a profit anymore” due to the increasing number of international regulations being put in place thus effecting the operating conditions. An interviewee well versed with the shipping industry insisted that “[when] people talk about sustainability—it is often from an environmental perspective and the same people would often then talk about the industry as if it has got some mission to destroy the environment which is clearly not in actual fact. The shipping industry is a business and unless the business model is sustainable, people will walk away from it.” Another interviewee explained, “I mean I have heard of ship owners that they will just say the market is not profitable for the next 10 to 15 years—we will sell everything and come back in 15 years' time when the market is better. For them it is just a money-making scheme—so people will say shipping is my life but if there is no money in it why to remain in it?” This calls for more attention within the IMO for action to ensure that the right context and conditions are there for shipping and that efforts should be made to adequately balance the three dimensions of sustainable development. IMO's role in regulating the shipping industry is critical towards ensuring a sustainable maritime transportation particularly because shipping is considered as an important enabler for most of the SDGs and therefore it has a pivotal role in ensuring sustainable economic growth (IMO 2017).

The findings suggest that more work should be done to further improve IMO's regulatory framework to ensure a better global maritime transportation system.

It was established that in terms of shipping, as a transport mode, it is unmatched. One interviewee claimed, "there is nothing that competes with it and is not like shipping will go away." Additionally, for Small Island Developing States (SIDS), shipping is the main trade driving force; these countries depend entirely on maritime transport. For the Caribbean SIDS, for instance, shipping is the main mode of transport as 95% of goods is imported by sea and the remaining by air transport. An overwhelming number of interviewees have stated that IMO is the de facto international regulatory authority for shipping. An interviewee explained, "IMO is an extremely important body; without it we will have chaos in the world." It also transpired that IMO is highly respected and the work it is doing is highly regarded. One interviewee insisted, "IMO has a strong element of pragmatism and has historically been at the very forefront of any new era in shipping so it is very natural for IMO to tackle the implementation of the SDGs." Several interviewees were of the opinion that provided that there was a Member States' agreement, thus setting the conditions right, IMO should eventually start its work on the SDGs across all organs and not just within TCC. In their view, the "SDG context" within IMO could soon be coming on board, provided that the right condition was there, i.e., engagement by Member States. One participant declared that "...we have lost some time but now is catch up time." Almost all the interviewees agreed that, at the end, IMO is all its members and therefore Member States should have been more proactive in bringing up 2030 Agenda at IMO in good time for discussion, just after it was adopted, thereby ensuring that the right context would be set within the IMO organs. IMO depends very much on the Member States' submission of the documents for consideration of new outputs. The research found that the IMO's Strategic Plans for 2016–2021 and 2018–2023 had very limited references to the SDGs in terms of Strategic Directions, SDG-related actions, and outputs. It was interesting to note that the responses from the interviewees were suggesting that in order to set the context right, IMO had to continue building on what had already been achieved by further formulation and elaboration of its strategy. As eloquently expressed by one interviewee, "IMO should harness what is already doing well and to profile that better and to make sure its articulation of its own strategy to implement the SDGs." Through this, the context would be set for generating better conditions that will assist IMO's Member States to come up with proposals for concrete action and improved SDG-related outputs in respect of the 2030 Agenda.

4.2 Actions and reactions—a need for Member States to come forward with input on the 2030 Agenda at IMO

The second largest paradigm of categories is the Actions and Reactions, which Strauss and Corbin (2015) describe as the actual responses of interviewees on the issues, events, or problematic situations for which people give meaning to them. The conditions and consequences do not stand in isolation but are the result of a rather complex movement between the two components which result in action and reaction. It provides an insight not only on what has happened in terms of action but also on what could be done to either manage or tackle better the responses (the actions within the context described in the previous sub-section).

The research found that in terms of actions during the period under study, IMO was behind in implementing the SDGs when compared with other UN Bodies, including the Food and Agriculture Organization⁷ (FAO), the International Labour Organization⁸ (ILO), and the International Civil Aviation Organization⁹ (ICAO). Most of the other UN Bodies had a clear action plan in their work related to the 2030 Agenda, and in most cases, action had started prior to the entry into force of the SDGs. It transpired very clearly that although the SDGs had been agreed by all Member States of the UN at a level of Heads of State, and although all countries had expressed a commitment to implement the SDGs (which was a result of an extensive consultative process that took number of years to achieve), IMO did not feature as a custodian of any of the 230 indicators of the 169 targets of the 17 goals of the SDGs, which were set to put in action the SDGs. As to the development of the SDGs, the research established that from an action point of view, the IMO Secretariat was very much involved in the formation of SDG 14. One interviewee explained that “IMO was involved in chiseling out the exact nature of the SDG 14 on the Oceans” because the IMO Secretariat was part of the UN Technical Support Team developing this goal.

In terms of the actual actions that have been carried out within the context of IMO's work, it transpired that prior to the adoption of the 2030 Agenda, the IMO Secretariat and several Member States were seeing the 2030 Agenda from the lenses of IMO's Integrated Technical Cooperation Committee (ITCP) only as also indicated in Section 2.2. It was found that the IMO's Strategic Plan for 2016–2021 acknowledged the ITCP as the mechanism that will play a pivotal role in IMO activities to support the achievement of the SDGs as it was recognized that the ITCP contributes towards the economic, social, and environmental aspects of sustainable development that are particularly important in the case of SIDS. The TCC was the first Committee to have started action by linking its work towards the relevant SDGs. So far, in terms of action, none of the other Committees had started to link their work,¹⁰ notwithstanding that their work is very much related to many SDGs. There was a general feeling among the interviewees that “the Organization should give direction to all Committees on what they should be doing on SDGs not just the TCC.” The research findings demonstrated that as much as IMO was successful with the MDGs in assisting developing countries, the SDGs need to be seen differently as they are also intended for developed countries. The picture which this conjures is that in order to initiate action, all of the IMO organs need to first align and link their work to the SDGs and then identify the gap in terms of sustainability by also emphasizing on the SDGs so that appropriate outputs are agreed against concrete performance indicators once action is taken.

The research identified a common assertion among interviewees that what makes the IMO is actually its members; hence, the IMO Secretariat depends on the proposed and agreed actions by Member States performing the right reaction. One interviewee expressed this very elegantly, “IMO at the end of the day is the Member States that makes it, but IMO is always seen as the UN special Agency that regulates and provides

⁷ <http://www.fao.org/home/en/>

⁸ <http://www.ilo.org/global/lang-en/index.htm>

⁹ <https://www.icao.int/Pages/default.aspx>

¹⁰ The IMO Council C118, held in July 2017, decided to task the IMO Secretariat to prepare a document showing how the outputs and the IMO Strategic Directions can be linked with the SDGs. The document will be discussed in July 2018 at the IMO Council C120.

direction to the shipping industry, so if IMO embraces this (2030 Agenda), we are convinced... I am convinced, that the whole shipping industry then will follow suit.” This suggests that if IMO was to be actively engaged on the SDGs and the 2030 Agenda when adopted, in terms of concrete actions, it had to be tasked directly by the Member States that constitute the Organization. One interviewee reflected, “IMO is actually a well-functioning UN agency and to be absolutely honest, this needs to be promoted as well through its work on the SDGs.” The research found that in stark contrast to these submissions, input from Member States on the 2030 Agenda, particularly in terms of paper submissions on SDG-related matters to Committee meetings between September 2015 and July 2017, was almost inexistent. This reaction has affected IMO’s actions towards the attainment of SDGs. The research pointed to a situation whereby in terms of actions, IMO’s work is “silo-based” and very much often geared towards particular issues. There is a general consensus that IMO should now start working towards sustainability through an appropriate strategy with “concrete actions for concrete SDG related outputs with a holistic view rather than of addressing only current issues” as one interviewee recognized. The research also indicated that there was support for IMO to include reference in the IMO Member State Audit Scheme (IMSAS)¹¹, in some form or another (but not as mandatory text) to the SDGs as this could also help Member States to secure action from their Government in taking on board the 2030 Agenda and increase participation. An interviewee proposed that “IMO can expand the scope of IMSAS to embrace the SDGs by making sure there is an alliance with this in the national transport maritime strategy/policy or a national ocean policy.” This, however, may be a complicated measure, which needs careful consideration if it is to be adopted.

The research findings suggest that action, in terms of debate within IMO Committees, on the 2030 Agenda and the SDGs at IMO has been somehow scarce and took place mainly from a TCC point of view and has not yet featured as an agenda item in the other Committees. During the IMO Council (C118), it was recognized that IMO has still to decide on what process is to be adopted for the implementation of the SDGs—likely to be agreed upon late 2018 beginning 2019. Results of this research have shown that the most apparent challenges that Member States are facing when it comes to action in respect of the 2030 Agenda are mainly due to policy incoherency as a result of fragmentation within government departments often due to poor coordination between Ministries notably between Ministries of foreign affairs and transport, leaving the latter to some extent unaware of the 2030 Agenda and the SDGs. One interviewee outlined that “the biggest challenge is the ‘silo’ mentality and one of the major challenges is that you find everywhere is—this is mine, this is not yours.” This inactivity on the SDGs in terms of action has been mirrored at IMO as Member States did not push for the Strategic Plan of IMO to be aligned with the SDGs during 2015 when the Strategic Plan for 2016–2021 was being agreed. However, the research identified those representing SIDS as the most forthcoming on the SDGs; they had good knowledge of the 2030 Agenda and knew how the SDGs can assist in the development of their

¹¹ The IMO Member State Audit Scheme (IMSAS) aims to provide an audited Member State with a possibility of an assessment of how effectively it implements and administers the mandatory IMO instruments falling under the Scheme (IMO, 2017b).

nations and their respective region which depend mainly on maritime transport for trade, commerce, and mobility.

During the course of the empirical research, it became evidently clear that a number of elements had to be in place in order for the stakeholders to be in a position to provide the desired action-reaction effect on sustainable development both internationally and nationally. It was found that a governance structure for sustainability, with the appropriate mechanisms to steer and with a clear strategy for sustainable development must be put in place at IMO for better action. Such framework would enable IMO to be in a better position to implement the 2030 Agenda in the international maritime transport domain as it foresees through its Vision Statement. A large number of interviewees suggested that, for matters related to sustainability within the context of 2030 Agenda, a strategic actor should be appointed at a national level to coordinate action nationwide with a view to maximize synergy among different entities so that no one is left behind. An interviewee reflected that ideally “each country will have a champion or a strategic actor to coordinate across the Ministries who will be empowered to report directly to IMO and vice-versa and who provides or coordinates inputs to be reflected in the strategy of IMO.”

4.3 Consequences and Outcomes—a need for strategizing towards the attainment of the 2030 Agenda and the SDGs

The conditions and consequences do not stand alone but are the result of a rather complex movement between the two components which result in action and reaction. Strauss and Corbin (2015, p. 161) posit *that* “since one event and the action that follows often leads to another and another, like links in a chain, it is often complex and difficult to sort through.” Figure 4 shows the mapping exercise for the categories that constituted the consequences and the outcomes flanked by the sub-categories, properties, and dimensions. The findings are summarized below.

Most of the interviewees had not been active in engaging themselves on the 2030 Agenda at IMO because they lacked knowledge on the SDGs, and as a consequence, they were still in the process of digesting what the SDGs really are at national level. Even though their respective countries were engaging slowly on the incorporation of the SDGs in their national sustainable development plans, throughout the period of this research, they were not aware of any substantial SDG-related action, with a shipping perspective in their country.¹² For concrete outcomes, the participants emphasized the importance of adopting best practices for integration, communication, and coordination at national level, such as among different Ministries as very often they employ different institutional frameworks, and at international level, particularly at IMO, as the SDGs are multi-faceted. Input on SDGs by Member States in terms of proposed outcome

¹² Most of the Member States that were interviewed were oblivious of what their country is doing on the 2030 Agenda. In actual fact, they were never consulted back home on the SDGs and yet they were expected to engage at IMO on how the implementation of the SDGs is to be effected from an international shipping point of view. What was indeed surprising was that a good number of these countries had in fact ranked among the top performing countries in respect of UN SDG achievements and were listed in the “The SDG Index and Dashboards 2017 Report which was completed by the Sustainable Development Solutions Network and the Bertelsmann Stiftung (SDSN 2017). This report provides information on the performance of those countries that are actively implementing the UN's 2030 Agenda and its 17 SDGs and is currently listing 157 countries.

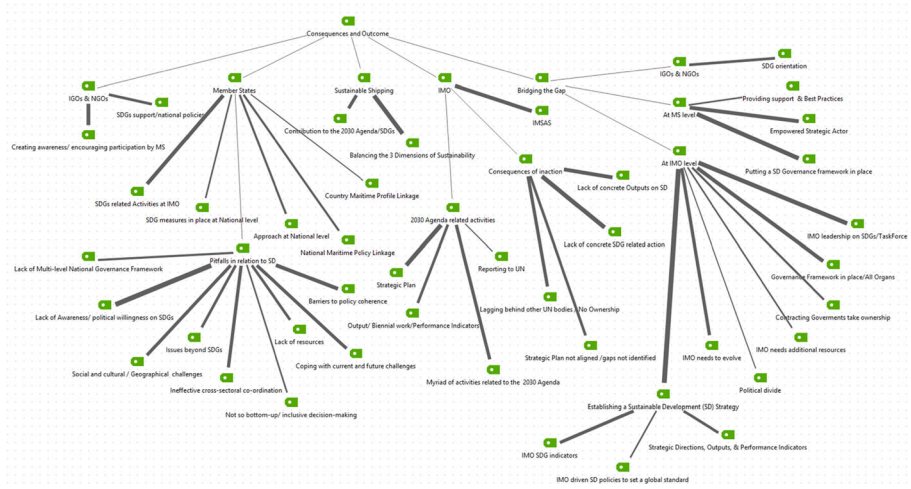


Fig. 4 Consequences and Outcomes—a need for strategizing towards the attainment of the 2030 Agenda and the SDGs

(outputs) for Strategic Plan for the 2018–2023 period was almost inexistent and consequently has affected the SDG-related outcome of IMO. There was general support by the interviewees to consider incorporating the SDGs from a shipping perspective into their national maritime policy and IMO Country Maritime Profile; however, more support on this is needed from IMO. The importance of NGOs' and IGOs' role in shaping the outcome at IMO and in ensuring coherence and coordination within their region or domain came out very clearly as they are the entrusted entities to represent their countries or their interest at national level and at IMO.¹³ But ultimately, they need the support of Member States. An NGO recognized that “we are able to meet with the Ministers, talk the language, and we are able to meet with the Heads of the Government even the Head of the State and we are trusted. We are a catalyzer and a chemical reaction, if you know what I mean. However, ultimately, without the willingness of the Member States, IMO will not produce any concrete outcome.” Another NGO made similar observations, “IMO alone cannot do anything. You have the Member States and they must be engaged. If the Member States are not engaged then IMO will move slowly.” The need for policy coherency between IMO, its stakeholders, and within Member States emerged as prime prerequisite for the successful implementation of the SDGs particularly in achieving the desired outcome, considering that input for IMO outputs depends on Member States and therefore is a direct consequence of their level of engagement. The audits that are carried out by IMO within the framework of IMSAS were seen as a tool that could be used to contribute towards achieving the desired outcome also in terms of the SDGs at national level, mainly among the SIDs. One interviewee commented, “just a simple line in the audit saying something like this: To what extent your country is contributing towards the implementation of the SDGs? Is there a strategy or a national program in place?” IMSAS would certainly help Member

¹³ The NGOs, in particular, were more concerned about the fact that the discussions on the 2030 Agenda at IMO took a considerable amount of time to start and as a result this has put IMO behind other UN bodies in terms of desired SDG outcome; however, the TCC has started to link its work activities with the SDGs.

States in pushing their Governments to act on the SDGs and to produce tangible outcomes that would be beneficial to the whole nation. The low level of engagement of most Member States, leading to almost no SDG-related outcome at IMO, was found to be a consequence of the very apparent lack of awareness on the 2030 Agenda and the SDGs; the lack of political willingness, commitment, and continuity (due to changing government cycles); lack of resources and funding; the fragmentation and dysfunctional entities or Ministries; the social and cultural differences that exists in a country compounded by geographical challenges; the lack of a multi-level national governmental framework that considers shipping as important sector (often “forgotten” and not included); the fact that some countries think more on the short term than on the long term (SDGs are seen as a long-term issue therefore are put aside); and the barriers to policy coherence within the government, all of which were found to be very common among the participants.

Issues that emerged and which need to be looked at by IMO to bridge the gap to maximize the outcome—basically IMOs’ outputs (which in turn brings about positive consequences in relation to the 2030 Agenda)—ranged from the need to narrowing down the imbalances and the political divide between the various maritime administrations around the world to improving IMO’s role on matters related the social aspect of seafarers by including more concrete outcomes through a dedicated Strategic Direction and from using the IMSAS, as an interviewee stated “to shaken up a little bit the governments on SDGs” to a need for balancing off the three dimensions of sustainability through its work, by putting equal emphasis on the social, environmental, and economical dimensions, since the latter was found to be not catered for within IMO.

It was established that generally speaking, IMO, as an institution, needs to clearly define what it aims to achieve in terms of outcome and outputs related to the SDGs—“identify where we want to go as we haven’t done that at Organizational level,” as an interviewee eloquently put it. In doing so, the IMO’s Secretariat is seen by a large number of those that have been interviewed as the *de facto* institution that could lead and guide Member States in the implementation of the 2030 Agenda within the international maritime transport domain, provided that resources are made available, and also likewise, Governments take also ownership. The research concluded that IMO still needs to agree by which means and by which process the SDGs are to be integrated into its work following which additional performance indicators may be developed for 2018–2023 (changes to the Strategic Plan, the performance indicators, and the outputs can be done every biennium). Discussing the importance of a clear process, another interviewee said, “I think they need to be more specific because the way it is right now it is going to be very difficult, if not impossible, for IMO to identify what kind of outputs need to be delivered by the IMO to meet the SDGs, it’s too vague.” The research identified a plausible way forward, *i.e.*, devising a dedicated strategy on sustainable development flanked with a strong governance framework. Gaps that will be identified could be tackled through new outputs and performance indicators, thus providing a firm commitment and clarity on how shipping can contribute to the SDGs¹⁴

¹⁴ An NGO stated, “I think part of the challenge for IMO is that because shipping doesn’t officially appear to connote to include the ocean, this is the big discussion that needs to have whether or not IMO has a mandate for the oceans but for me since all ships are crossing the oceans IMO has responsibilities *vis-à-vis* the oceans.”

through concrete SDG-related outcomes. The need for the IMO Secretariat to evolve and to improve its structures was also highlighted for better outcome particularly in establishing a Task Force that assumes a central role on sustainability by improving governance on sustainable development, provided that more effective mechanisms are put in place. The research concluded that, through a strategy on sustainable development, IMO would be more strategically oriented towards fulfilling the 2030 Agenda and SDGs with concrete outcomes. One interviewee sustained that “what IMO should have done was a Sustainable Development Strategy—so as to be able to say—ok this is what we have done, now let’s define what do we want to focus on in the future—that is the whole purpose of the SDGs, it is not what we have done—it is what we have done so far but also what we are going to do.” The importance of putting a sustainable development strategy for concrete outputs was also seen from the perspective of national engagement by Member States. Making this point, one interviewee said that “it would be a sustainable development strategy that can communicate down to Member States level and that there has to be feedback coming back”. But a sustainable development strategy has to have a sound steering mechanism, a good governance framework for maximizing IMO’s outputs, as an interviewee stated, “The governance structure must be clearly defined and delineated otherwise everybody will be stuck and everybody will be loose.” The research further found that in addition to the linking of its current work with the SDGs, IMO needs also to identify where the gaps are and furthermore how these gaps can be narrowed by each organ of IMO and subsequently bridged thus contributing towards sustainability and the attainment of the SDGs. Numerous examples were communicated by the interviewees as to what IMO is doing exceptionally well in terms of outcome and outputs to ensure safe, secure, and efficient shipping through its regulatory framework—ranging from safety requirements (SOLAS Convention¹⁵) to environmental protection (MARPOL Convention¹⁶) and from training and competency of seafarers (STCW Convention¹⁷) and contribution to the legal framework governing the rights and responsibilities of nations in respect of ocean space (UNCLOS Convention¹⁸). References were made to SDG 14 (conserve and sustainably use the oceans, seas and marine resources for sustainable development), particularly in respect of the sterling work that IMO is doing on marine pollution, and the conservation and sustainable use of oceans, and SDG 13 on climate change (air pollution and greenhouse gas emissions from ships). Figure 4 shows an example of the resulting mapping exercise using MAXmap for the high-level framework’s categories, sub-categories, properties, and dimensions of the Consequences and Outcomes of the matrix. The thickness of the connecting lines demonstrates the intensity of coding of each coded segment. As can be seen from the resulting map, Member States have been experiencing several challenges in relation to sustainable development and the 2030 Agenda. The most pressing ones are lack of awareness and political willingness, ineffective coordination, and policy incoherency, which have also been found to be present elsewhere when pursuing sustainable development, as the literature review suggest. Of significance importance, is that the findings suggest (see

¹⁵ International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended.

¹⁶ International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of the 1978 relating thereto and by the Protocol of 1997 (MARPOL).

¹⁷ International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW).

¹⁸ The United Nations Convention on the Law of the Sea (UNCLOS).

Bridging the Gap, At IMO level) that there is a need for establishing a sustainable development strategy at IMO as this can potentially leverage IMO's output on the SDGs which in turn will also engage and raise awareness among IMO's stakeholders.

5 Conclusion and propositions

This research explored the role and challenges of IMO and its stakeholders when implementing the 2030 Agenda for Sustainable Development in the international maritime transport domain. The research was based on the premise that IMO, and its Member States will continue to seek ways on how best to integrate the SDGs into IMO's work as presently such process is not in place as confirmed by the IMO Council held in July 2017 (IMO 2017f). On the basis of the empirical findings, this paper presents six propositions, which address the three objectives of this research and which were derived from the pattern in the data all of which also fit with the constructs found. The first proposition describes the phenomenon that has contributed to the factors that have delayed IMO in starting its work on the 2030 Agenda. It is complemented by five propositions, which were identified as essential elements for a potential solution to the main concern of the interviewees to better respond to the 2030 Agenda and the corresponding SDGs in a coherent way.

5.1 Propositions in relation to objective 1 of the research study

Proposition 1: While Member States may be fully engaged in subscribing to international commitments, such as the UN 2030 Agenda, the effective implementation of such commitments may be too complex to handle, often due to lack of policy coherency, coordination at national level, and not so clear knowledge about the 2030 Agenda. This is often compounded by a lack of understating on what needs to be done at Member State/s level to achieve the desired results. This in turn will have an impact on the effectiveness of the internationally based institutions which are expected to be engaged by the same Member State/s to maximize the benefits of such commitment. As these institutions largely depend on the submissions of Member States to initiate action through their work program at international level (such as IMO), the end result will often be a soft start followed by low level of engagement which may often not reflect the amount of commitment that was originally envisaged. The degree by which an institution can quickly react to new developments has also a bearing on the type of institution—if it is program based there is a certain amount of flexibility unlike when this concerns a regulatory based institution such as IMO.

Proposition 2: The importance of having a well-defined governance structure, possibly under the auspices of the office the Secretary General, such as a permanent Task Force as suggested by many interviewees, was manifested very clearly. The Task Force, as a steering mechanism for the implementation of the 2030 Agenda, should promote and oversee the fulfillment of the SDGs by also addressing the dire need for balancing the three dimensions of sustainable development within IMO's work through regular feedback from stakeholders.

5.2 Propositions in relation to objective 2 of the research study

Proposition 3: Member States often look at IMO as the institution that not only regulates international shipping but also to be the *best placed* and *trusted* institution to deal with cross-cutting shipping related issues which require an organization to internationally lead the realization of complex initiatives within the shipping domain. Member States that see IMO in this way want IMO's Secretariat to assume the much-needed critical role of taking a strategic lead in the implementation of the 2030 Agenda for Sustainable Development and the SDGs in the shipping domain. The research also established that there is no particular SDG focusing solely to transport, yet transport is a major contributor to a number of SDGs. It was found that there is a need for establishing an international platform among the UN's bodies, including program and funds, to cater for transport in the context of the 2030 Agenda (similar to existing ones for energy, water, and oceans) in which the IMO Secretariat can actively participate. This need was underscored by many interviewees as they believe this would ensure that Member States are always kept actively abreast on matters related to sustainable development stemming out from the 2030 Agenda, which, in turn, will enable them to be more engaged and committed to the accomplishment of the SDGs within their country.

Proposition 4: Member States that exhibit the properties described in propositions 1 and 2 suggest that there must be a Strategy for Sustainable Development in place at IMO, as part of its Strategic Plan The Strategy for Sustainable Development should provide clear strategic means for IMO to translate and integrate, with a certain degree of priority, the work of its Committees with the 2030 Agenda so that gaps, new actions, performance indicators and outputs will be identified and put in place.

5.3 Propositions in relation to objective 3 of the research study

Proposition 5: The success of a proper action and subsequently the fulfillment of the SDGs at national level were seen by a large number of Member States as having a dependency on the ability of who is responsible to coordinate and carry out the interaction among the various Ministries and bodies making up the Government. If there was a Strategic Actor on sustainable development in place at national level, acting as a focal point, who would interact with IMO regularly (i.e., with the proposed Task Force—proposition 2), issues related to lack of effective communication and coordination and policy incoherency at national level would be reduced significantly if not eliminated. Such interaction on the 2030 Agenda is even more necessary, insofar as to what concern maritime issues particularly at the level of oceans, as these issues have a global effect, far beyond national frontiers.

Proposition 6: A way of ensuring that Governments are kept *on check* on their commitment towards the SDGs was the proposal for the inclusion of a reference to the 2030 Agenda for Sustainable Development in IMO's IMSAS, as many interviewees suggested. While it was generally expressed that IMSAS cannot enforce the implementation of SDGs at national level, as the SDGs do not fall within any of IMO's instruments subjected to the audit, having a soft reference to the SDGs in

IMSAS would help maritime administrations by no small means, such as SIDS, in seeking firm commitment from Governments on the 2030 Agenda for Sustainable Development.

Through this research, the authors have acquired deeper and broader knowledge on the type of challenges that may be encountered during the implementation of the 2030 Agenda for sustainable development in the maritime transport domain within the context of IMO. The propositions drawn by the authors, as presented in this paper, are based on the analysis of empirical data directly collected from where the international action is—at IMO, were validated and are widely applicable. However, the propositions must be seen as a part of a process of addressing the concerns of the participants attending IMO meetings. The authors of this paper believe that further research is required, particularly at national level, within maritime administrations and with cross-sectoral entities to further understand what is behind the issues that were identified during the research as described in Section 4. It is clear that the level of performance of Member States at IMO is not consistent among Member States and the degree of engagement varies depending where the prime interest of the Member State is—a stance very much common in other UN system bodies. The proposition of establishing a Task Force within IMO, as suggested by many respondents, may be the solution to have a better governance structure for facilitating the implementation of the 2030 Agenda. However, prior to the setting up of a Task Force, it must be first established how such Task Force should be set up to operate effectively so as not to replicate already existing structures within IMO, i.e., the role should be very well defined. Likewise, it must also be seen how the proposed strategy for sustainable development could form part of IMO's Strategic Plan under the Strategic Directions so that new SDG-related outputs will be identified and agreed upon.

In conclusion, it is suggested that more in-depth studies should be carried to further analyze how best the abovementioned propositions can be addressed. Such studies could further identify what is additionally needed to effectively implement the 2030 Agenda for Sustainable Development and the SDGs in the maritime transport domain in accordance with best practices in the field.

Compliance with ethical standards

Disclaimer The content of this paper does not necessarily reflect the official opinion of the European Maritime Safety Agency. Responsibility for the information and views expressed in this paper lie entirely with the authors.

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