



DEFENDING HUMANITY AT SEA

ARE DEDICATED AND PROACTIVE SEARCH AND RESCUE OPERATIONS AT SEA A “PULL FACTOR” FOR MIGRATION AND DO THEY DETERIORATE MARITIME SAFETY IN THE CENTRAL MEDITERRANEAN?

“Migrants in boats are symptoms, not causes, of the problem”

Jovana Arsenijevic /Marcel Manzi/ [Rony Zachariah](#)*
Médecins sans Frontières,
Operational Research Unit (LuxOR)
68 Rue De Gasperich, Luxembourg

*Correspondence: rony.zachariah@brussels.msf.org

(With contributions from Stefano Argenziano, Federica Zamatto, Aurelie Ponthieu, Wilma van Den Boogaard, Marco Bertotto, Christophe Hebting, Paul Delaunois, Samuel Siebler, Catherine van Overloop, Alesandro Siclari, Francisco De Bartolomo...)

FOREWORD

This report has been elaborated by Médecins sans Frontières (MSF) and the findings corroborate with two other studies focussed on migrants' mortality at sea and search and rescue activities:

*Blaming the Rescuers: criminalizing solidarity and re-enforcing deterrence*ⁱ
*Border deaths in the Mediterranean: What we can learn from the latest data*ⁱⁱ.

Each of these independent studies –using different methods- has conducted data based analysis leading to rather similar conclusions.

SUMMARY BOX

What prompted MSF and other NGOs to go to sea?

- Due to the lack of alternative options, tens of thousands of people embark on perilous sea journeys through the Central Mediterranean to Europe for various reasons.
- In late 2014, Italy retreated from its large-scale rescue operation (Mare Nostrum) and the EU replaced it with the Frontex Operation Triton reportedly leading to thousands dying at sea.
- As from May 2015, Non-Governmental Organizations (NGO's) including MSF stepped in with humanitarian vessels to fill this gap. *They were later in 2016 met with accusations by Frontex, EU politicians and the media.*

What are the accusations against the humanitarian actors?

- *Dedicated "Search and Rescue operations conducted by the humanitarian vessels are serving as a "pull factor" for migrants/ refugees to attempt dangerous sea journeys"*
- *"Such Search and Rescue operations have contributed to a deterioration of maritime safety by increasing deaths and missing in the central Mediterranean"*
- *NGOs conducting dedicated and proactive search and rescue are colluding with smugglers*

What analysis is presented in this report?

- A comparative analysis of trends in attempted sea crossingsⁱⁱⁱ and adverse sea outcomes (deaths + missing) in relation to three periods: the operational phase of Mare-Nostrum, the operational phase of Triton-only and the period of involvement of humanitarian vessels in sea rescues.

What are the key findings from this report?

- The yearly pattern of attempted sea crossings (2014-2016) suggests a 'temporal/seasonal trend' of migration with a 9-17% fluctuation per year. This rather low level of fluctuation is not supportive of any major pull factor for people taking to sea.
- Trends in attempted sea crossings were just about 1.6% higher since the involvement of humanitarian vessels compared to the Triton-only period. This further negates the suggestion that the presence of humanitarian vessels was a major incentive (pull factor) for attempted sea crossings.

ⁱ <https://blamingtherescuers.org/> accessed on Aug 31st 2017

ⁱⁱ <https://www.law.ox.ac.uk/research-subject-groups/centre-criminology/centreborder-criminologies/blog/2017/03/border-deaths> accessed on Aug 31st 2017

ⁱⁱⁱ Attempted sea crossings: is to be considered as the cumulative figure of those who arrived to the Italian coasts + those who were rescued and disembarked to Italy+ the reported dead/missing at sea + the number of those intercepted by the Libyan coast Guards at sea and brought back to the Libyan shores

- During the activity of humanitarian vessels, compared to the Triton-only period, adverse sea outcomes decreased from 39/1000 attempted sea crossings to 16/1000 – a 59% improvement in maritime safety.
- Over eight in ten boats rescued by MSF during their humanitarian involvement were rubber-boats that were overcrowded up to 5-fold their capacity. With such overloading, these vessels are to be considered *in distress* according to European standards from the moment they launch. Moving rescue assets closer to the Libyan coast responds to a pre-emptive humanitarian necessity to prevent deaths.

What are the main conclusions?

- The accusations levelled against the humanitarian vessels are not substantiated by evidence. There was no major increase in attempted sea crossings during the period of involvement of the humanitarian vessels (as would be expected by the pull factor hypothesis).
- Importantly, the involvement of humanitarian vessels was associated with a significant improvement in maritime safety compared to other periods. Without these boats, the counts of dead and missing at sea would likely have been considerably higher. The proactive search and rescue by humanitarian vessels have thus played a crucial and life-saving role.

Limitations/ Further research

- Data presented in this report is observational data and does not demonstrate direct ‘cause-effect’. The findings highlight statistical ‘associations’. As such, it is impossible to isolate the specific role(s) played by humanitarian vessels (vis-à-vis other actors).
- Specific research is needed to better understand the background drivers of migration which are complex and go beyond the naïve discourse of pull/push factors.

The accusation that humanitarian rescuers are a pull factor for migrants is akin to saying that “NGOs working in a refugee camp are the reason for refugees.”

THE "MUST KNOW" BEFORE READING THIS REPORT

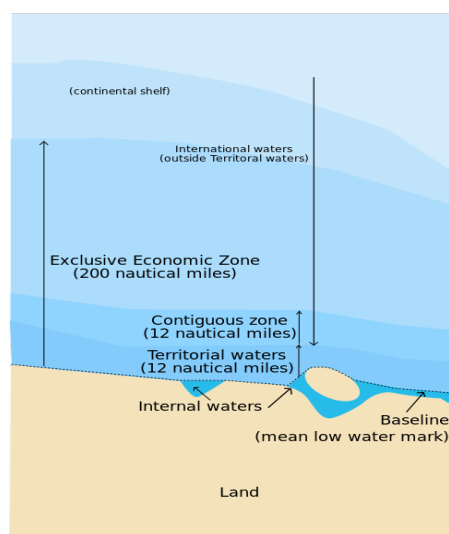
- **Mediterranean sea routes for migration:**
 - **Central Mediterranean route:** from North Africa to Italy and Malta.
 - **Western Mediterranean route:** which reaches Spain from North West Africa,
 - **Eastern Mediterranean route:** from Turkey to Greece.

Figure: Routes for irregular migration through the Mediterranean Sea



- **Maritime zones**
 - **Internal waters:** a nation's internal waters include waters on the landward side of the nation's territorial waters. It includes waterways such as rivers and canals, and sometimes small bays.
 - **Territorial waters:** is a belt of coastal waters extending 12 nautical miles (22.2 km) from the baseline (usually the mean low-water mark) of a coastal state. Authorization from national authorities is needed to enter these waters.
 - **Contiguous zone:** Lies adjacent to the territorial sea but up to 24 nautical miles (40,7 km) from the baselines from which the breadth of the territorial sea is measured. Within the contiguous zone the coastal state may exercise the control necessary to prevent/punish infringement of its fiscal, immigration, or sanitary laws within its territory or territorial sea.
 - **International waters (High Seas):** includes all parts of the sea that are not included in the Territorial sea or in the internal waters of a state

Figure: Maritime zones



- Operation Mare-Nostrum** (*Period: October 2013-Oct 2014*): was a year-long naval and air operation commenced by the Italian government on October 18, 2013 after the greatly mediatized Lampedusa shipwreck of 3rd October 2013 when 368 migrants died off the Italian coast.[1,2] *The operation aimed to identify boats in distress and then launch - a proactive “Search and Rescue” operation with a policing and anti-smuggling component^{iv}.* Significant human and financial means were placed at its disposal (Assets: one thousand people, six naval units, helicopters equipped with infra-red lights, maritime patrol aircrafts, drones and coastal radars.[1] Cost=9 million/month). Thanks to Mare Nostrum, at least 150,000 migrant lives were rescued. Mare Nostrum ended in October 2014, largely because of a lack of European Union support and being considered a pull factor for migration. It was superseded by Frontex's “Operation Triton”.
- Operation (Frontex 1, Triton Only** *period Nov 2014-April 2015*): Triton is a border security operation conducted by Frontex, the European Union's border security agency. Unlike Mare Nostrum, *Operation Triton aimed on border protection rather than search and rescue, and operated closer to the Italian coast (Assets: two fixed wing surveillance aircraft, three patrol vessels, two coastal patrol vessels, two coastal boats and one helicopter. Cost=4.6 million/month).*[3] Sea rescues were relegated to only what is routinely demanded by maritime obligations with no dedicated and proactive “Search and Rescue” operations. The termination of Mare Nostrum has been criticized for a nine-fold increase in deaths at sea between 2014 and 2015, [2]. Triton saw an extension of its operational scope and budget in April 2015 (Triton II). However as from May 2015 dedicated Search and Rescue by the humanitarian vessels started and we consider the post-Triton 1 period different from a proactive SAR perspective.



- Operation Sophia. European Union Naval Force Mediterranean (EUNAVFOR Med^v, Period: May 2015 to date)**: The EU's launched a military operation known as Sophia *aims to ‘disrupt the business model of human smuggling and trafficking networks in the Central Mediterranean’ by efforts to identify, capture and dispose of vessels used or suspected of being used by smugglers.* The operation priority is apprehending smugglers rather than rescuing the migrants themselves. Operation Sophia's contribution to Search and Rescue has always been secondary to their intelligence and anti-smuggling mandate. (Assets: 5 naval units and 5 patrol aircrafts. Cost 1 million/Month)[4]

^{iv} As per official sources (<http://www.marina.difesa.it/cosa-facciamo/operazioni-conclude/Pagine/mare-nostrum.aspx>) the anti-smuggling component of Mare Nostrum led to identify and hand over to Italian Judiciary Police 366 alleged smugglers, 15 vessels were inspected / boarded on suspicion of being involved in smuggling, 9 ships were apprehended, of which 5 were motherships.

^v The Mission operates under the UN Security Council Resolution 2292 (Chapter VII mandate)

Operation Sophia has *three phases*

- *Phase 1 (June 2015-October 2015)*: surveillance and assessment of human smuggling and trafficking networks in the Mediterranean.
 - *Phase 2 (October 2015 to date)*: board, search, seize and divert vessels on the high seas used for human smuggling (Phase 2A) and then move the same operations to Libyan territorial waters (Phase 2B). Sophia is currently in phase 2A. Training of the Libyan coast guard was mandated in June 2016
 - *Phase 3*: disposal of vessels and related assets, preferably before use, and to apprehend traffickers and smugglers on Libyan shores.
-
- **Humanitarian vessels involvement** (*Period May 2015 to date*)^{vi}. MSF introduces three boats (The Argos, Dignity 1 and Phoenix in collaboration with MOAS). MSF search and rescue operations are coordinated by the Italian Maritime Rescue Coordination Center (IMRCC). MSF patrols in international waters at around 20 nautical miles off the coast of Libya during the day, moving closer to territorial waters if instructed to do so by the IMRCC or if they become aware of a boat in distress.
 - In 2016 several other NGOs joined the humanitarian vessels making a total of about a dozen boats at sea (Sea watch, Sea eye, Jugend Rettet, Proactiva-Open arms, Bootvlucht, and Save the Children etc.) (Total cost= unavailable).
 - In theory, all humanitarian actors operate a dedicated and proactive Search and Rescue activity: their intended mission is to save lives at sea and they try to position their operational assets in the areas where the risk of loss of lives is considered higher.
 - These humanitarian actors operate parallel to the Triton Mission and Operation Sophia, that have a focus on border control and anti-smuggling.

^{vi} The Migrants Offshore Aid Station (MOAS) launched its rescue ship “Phoenix” on August 25th 2014 and run operations till October of the same year.

BACKGROUND

- The Italian state-led “Mare Nostrum” , which was a dedicated “Search and Rescue” operation ended in October 2014[1,2]. This was largely due to a lack of European Union support and the operation being considered a pull factor for migrants.
- It was superseded by Frontex's “Operation Triton” whose mandate involved controlling European borders without any dedicated “Search and Rescue”. On 25th April 2015, the President of the European Commission, Jean-Claude Juncker said *“It was a serious mistake to bring Mare Nostrum operations to an end. It cost human lives”*[5]
As a buffer response, in May 2015, Médecins Sans Frontières (MSF) launched its own dedicated Search and Rescue operations with medically equipped ships having a capacity of carrying 400 to 700 people.[6] MSF’s objective was to try to save human lives at sea, pragmatically accepting a vicarious role of responsibilities of States’.
- In late 2016, politicians and officials in EU member-states (Italy, Belgium and Austria) made the following allegations in the media [7,8]:
 1. **“Dedicated and Proactive Search and Rescue operations conducted by humanitarian vessels serve as a “pull factor” for migrants/ refugees leading to more migrants attempting dangerous sea crossings”**
 2. **“Dedicated and Proactive Search and Rescue conducted by these humanitarian actors has contributed to a deterioration of maritime safety by increasing deaths and missing in the central Mediterranean”**

OBJECTIVES OF THIS REPORT.

To assess if dedicated and proactive Search and Rescue Operations by humanitarian actors (including MSF) have served as a pull factor for migrants and contributed to a deterioration of maritime safety (deaths and missing) in the Central Mediterranean.

METHODS

Design: A comparative analysis in relation to periods before and after the involvement of the humanitarian vessels in maritime rescue.

Study periods

- Jan 2014 to Oct 2014^{vii}: The Mare Nostrum period
- Nov 2014 to April 2015: The Triton-only period
- May 2015 to Dec 2016^{viii}: MSF and other humanitarian organizations get involved (the humanitarian vessels period)

^{vii} The comparison of periods is based on data from the International Organization for Migration (IOM), which is available consistently from January 2014. As no IOM-data was available for November and December 2013, we used available data from the Maritime Rescue Coordination Centre (MRCC) and other sources. While these numbers are likely to underestimate attempted sea crossings due to unrecorded deaths or missing persons, it allowed us to reduce the risk of a non-inclusion bias in comparing the operational periods of Mare Nostrum, Triton, and humanitarian vessels involvement.

^{viii} Data censored at the time of analysis was December 2016.

Data sources (databases):

- International Organisation for Migration (for data on shipwrecks, died and missing from Jan 2014 and interceptions by the Libyan Coast Guard in 2016)
- Maritime Rescue Coordination Centre, Rome (for data on rescues and actors)
- MSF (for data on dedicated Search and Rescue by MSF)

Data limitations

- Adverse sea outcomes (reported missing and deaths) are likely to be underestimates of the real situation as not all deaths and missing are likely to have been ascertained
- “Missing at sea” are likely to be deaths. Since the true outcome is unascertained, we have used the term “adverse sea outcomes” implying a combination of died and missing.
- All data on adverse outcomes and attempted sea crossings should be considered estimates as ascertainment bias is likely.

Data analysis

- Trend analysis using excel graphics for data visualization
- Standardization of adverse sea outcomes (died + missing) per 1000 attempted sea crossings^{ix}
- Spatial mapping of shipwrecks and rescues using Geographic Information System
- Estimation of difference in proportions and relative risks as appropriate

RESULTS

1. Geographic representation of ship wrecks and deaths central Mediterranean migrant route.

- A total of 225 adverse sea incidents (including shipwrecks and other events leading to death and missing at sea) were registered by IOM during the period 2014-2016. Adverse sea incidents here imply all types of boats irrespective of size (rubber dinghy’s wooden boats included). The median number of adverse sea incidents per month during Mare-Nostrum was 4, during Triton-only was 3 and during the involvement of humanitarian vessels it was 7.

Figure 1: Cumulative adverse sea incidents and related deaths/missing (January 2014-December 2016) – please click on PDF insert below.



Fig_1_sea_incidents
_tot_A1_170630_V3.

Observations/conclusions

- There is a diffuse spatial distribution of adverse sea incidents implying that the entire Central Mediterranean is affected.
- During the Mare-Nostrum (purple circles) and Triton-only (red circles) periods, there was a clustering of incidents towards the middle of the Central Mediterranean. The numbers of

^{ix} Attempted sea crossings: is to be considered as the cumulative figure of those who arrived to the Italian coasts + the reported dead/missing at sea + the number of those intercepted by the Libyan coast Guards at sea and brought back to the Libyan shores^x A larger deployment of humanitarian vessels may have led to an increased ability to witness the occurrence of smaller scale events, which would have gone otherwise unnoticed.

deaths (size of circles) during the same periods were also larger which may imply larger boat-capacity and size.

- During the humanitarian vessels period, most of the incidents (circles) are small and likely to imply smaller boat capacity and size (smaller numbers of people reported dead or missing)^x. Clustering of incidents is seen closer to the Libyan coast (the contiguous zone).
- These findings may be related to the impact of Operation SOPHIA Phase 2A (High Seas), where smugglers can no longer recover smuggling vessels on the high seas, rendering them a less economic option for the smuggling business. Thus, they may increasingly opt for single-usage rubber boat assets which are less robust and more prone to sinking.[9,10] Such boats are being bulk shipped from China. [11] Anecdotal reports suggest decreasing quality of the rubber boats used, an increased trend of massive launching of several vessels at the same time, and less fuel, food and water provided on board.
- The presence of humanitarian Search and Rescue assets close to the Libyan coast may also have affected the dynamic of new smuggler practices but specific data in this regard is lacking.

2. Accusation 1: Is dedicated Search and Rescue operations a “pull factor” for migrants/refugees”

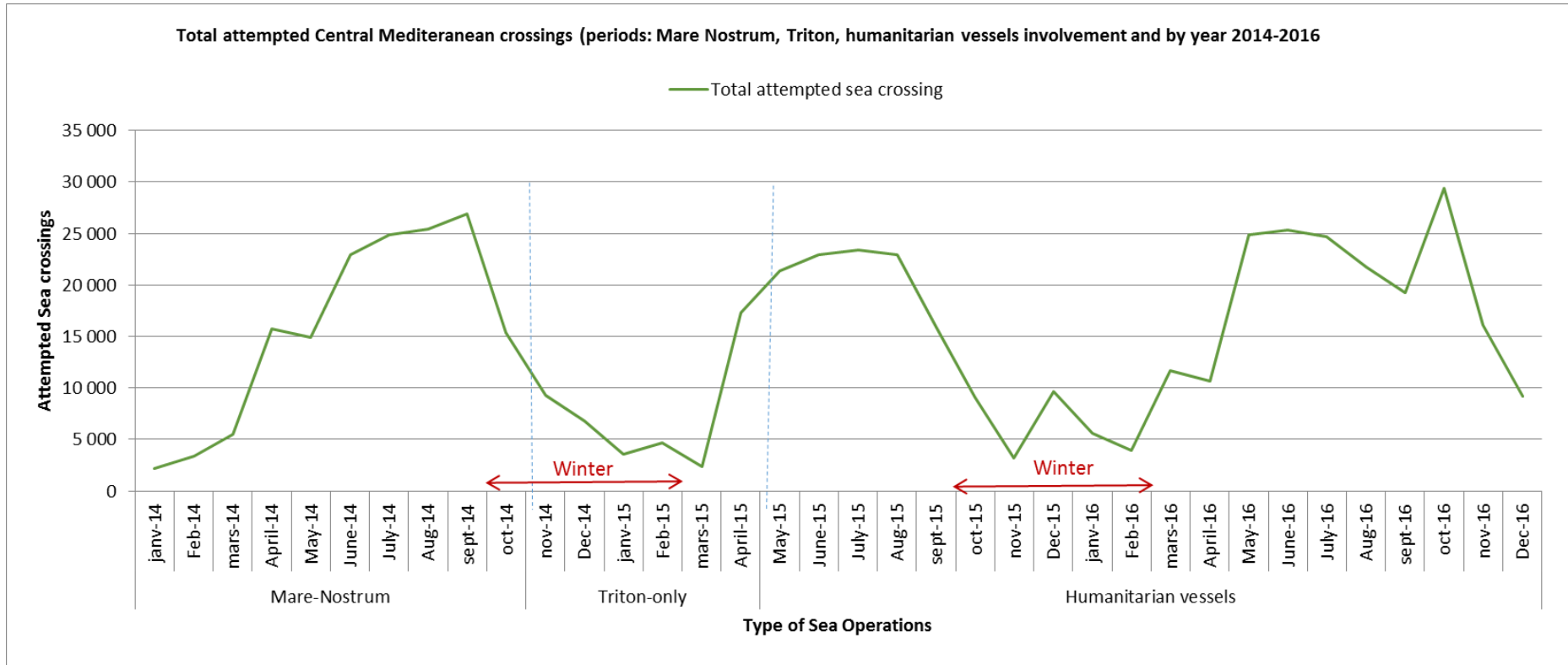
In order to assess the ‘pull factor’ hypotheses we first visualize the seasonal trend in migration per year between 2014 and 2016 (**Figure 2.1**).

Because migration is indeed seasonal as seen in Figure 2.1, with more arrivals in summer than in winter, other things being equal, we compare equivalent months stratified by type of sea operations to adjust for seasonality. Thus we compare total number of attempted sea crossings during the Triton-only period (November 2014–May 2015), to equivalent periods of Mare Nostrum (November 2013–May 2014) and humanitarian vessels involvement periods (November 2015–May 2016).

If the ‘pull factor hypothesis’ is true we should expect more attempted sea crossings during the Mare Nostrum and the humanitarian vessels periods than during the Triton-only period.

^x A larger deployment of humanitarian vessels may have led to an increased ability to witness the occurrence of smaller scale events, which would have gone otherwise unnoticed.

Figure 2.1: Trends in “all attempted sea crossings to assess seasonal trends” (Periods: Mare-Nostrum, Triton-only and humanitarian vessels involvement and by year 2014-2016)



Data source – IOM.

All attempted Sea crossings = Died + Missing+arrived + Rescued by Libyan coast guard

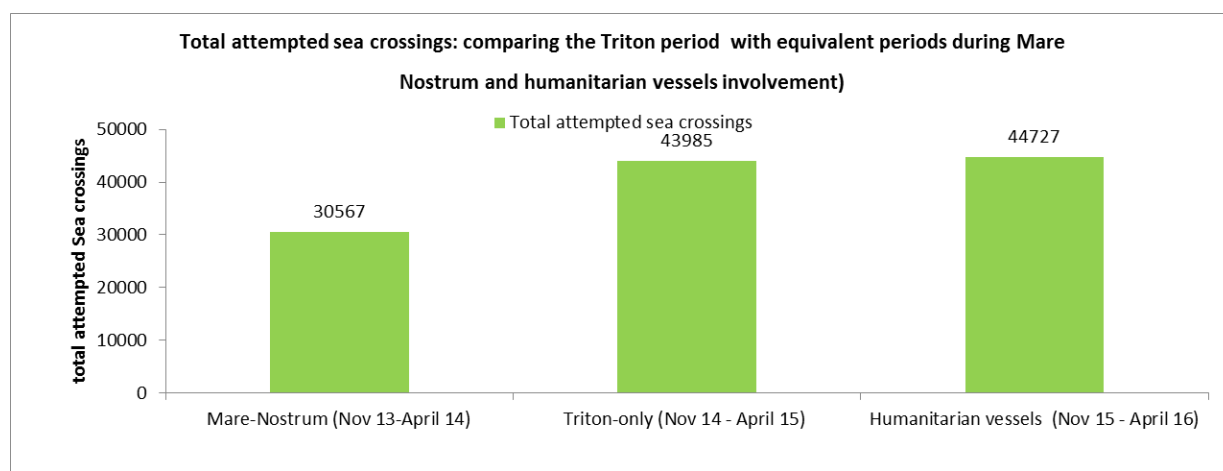
Observations

- The overall trend of attempted sea crossings between 2014 and 2016 is similar.
- There is a relatively low level of fluctuation in total numbers of attempted sea crossings by year which supports a temporal picture rather than one influenced by the presence of sea operations:
 - 2014 – 173218
 - 2015 – 156249
 - 2016 – 202297

↑ ↓ Fluctuation of 9-17% using 2014 as reference

Figure 2.2 Trends in “all attempted sea crossings” comparing equivalent periods of Mare-Nostrum, Triton-only and NGO involvement (humanitarian vessels) to adjust for seasonal variations

If dedicated SAR operations encourage more people to go to sea, we would expect more attempted sea crossings during Mare-Nostrum and the humanitarian vessels involvement periods compared to the Triton-only period.



Data sources: Deaths at the Borders: Database for the Southern EU (for deaths Nov-Dec 2013)

IOM for deaths and missing from Jan 2014

Arrivals data from UNHCR except for Nov/Dec 2013 where total rescues from MRCC was used – likely underestimate.

Libyan Coast Guard rescue data – IOM

Observations

- The attempted sea crossings in the Triton-only period was 44% higher than during Mare-Nostrum. During the humanitarian vessels period compared to the Triton only attempted sea crossings was just 1.6% higher. This shows that there is no evidence to suggest that the presence of humanitarian vessels performing proactive and dedicated SAR is associated with any significant pull factor.

General Conclusions

- The pattern of attempted sea crossings suggests a largely temporal/seasonal migration pattern. The type of sea operations per-se does not seem to deter the overall trend of migration.

- *The fact that attempted sea crossings were just about 1.6% higher in the humanitarian vessels period compared to the Triton-only period suggests that there is no evidence of NGOs being associated with being a pull factor.*
- Data suggest that people are thus attempting sea crossings irrespective of the type of sea operations. Drivers of migration (conflict, prosecution, drought, poverty etc.) are likely to be playing a more important role than the type of search and rescue operations. The allegations built against humanitarian search and rescue efforts are not evidence-based and fail to consider the background complexity of migration dynamics.
- The pull/push factor arguments thus ignore the complexity of migratory movements and essential aspects such as
 - The fact that migratory journeys are fragmented and not linear
 - That multiple factors impact the decision to move and that migrants often have very little knowledge of European policies
 - That people have very rarely a clear plan regarding their final destination
 - That the majority of people crossing the sea to Europe have transited through Libya because of lack of alternatives.

3. Accusation 2: Is dedicated Search and Rescue operations by the humanitarian vessels contributing to a deterioration of maritime safety in the Central Mediterranean

Figure 3.1. Adverse sea outcomes (died and missing) standardized by 1000 attempted Sea Crossings (periods: Mare Nostrum, Triton-only and humanitarian vessels involvement)

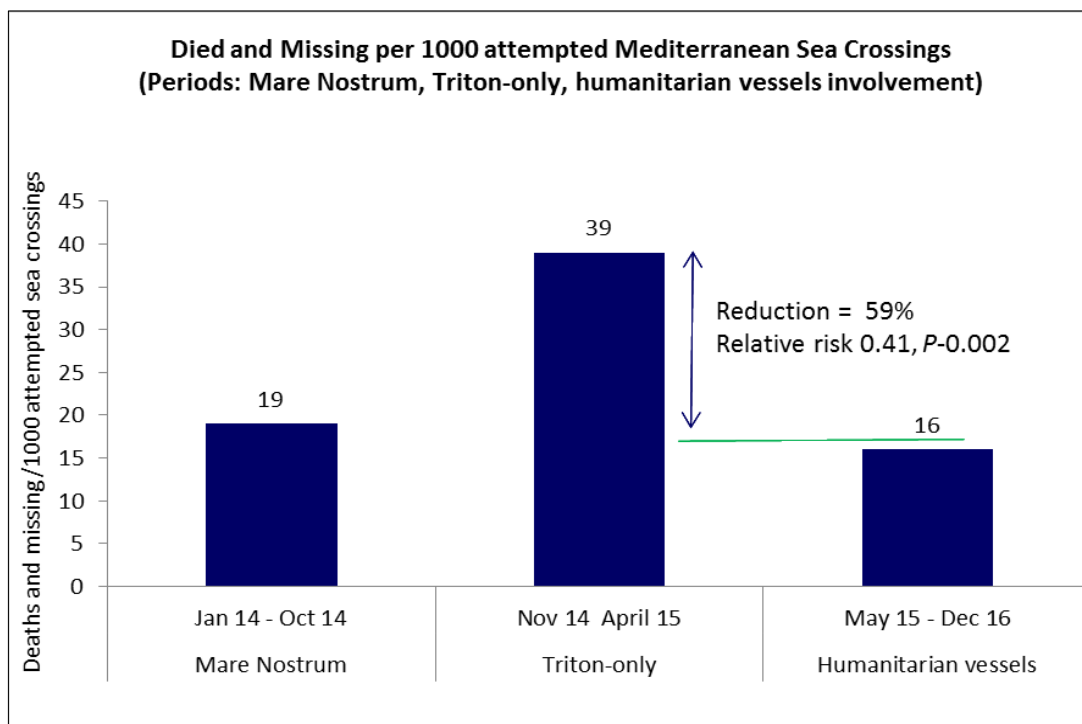


Table 3.1. Data on adverse sea outcomes (died and missing) standardized by 1000 attempted Sea Crossings (periods: Mare Nostrum, Triton and humanitarian vessels involvement)

	Period	Arrivals to Italy and all rescued ¹	Total Died & Missing	Attempted sea crossings ²	Died & Missing/1000 attempted Sea crossings ²
Mare Nostrum	Jan 14 - Oct 14	154073	3048	157121	19
Triton-only	Nov 14 April 15	42255	1730	43985	39
Humanitarian vessels	May 15 - Dec 16	325343	5315	330658	16

¹ Includes arrivals in Italy and rescues/interceptions done by the Libyan Coast Guard

² Attempted sea crossings = Arrivals in Italy+ Rescued by Libyan Coast Guard + Died and Missing

³Standardized using total attempted sea crossings during the respective periods (Total died and missing / arrivals+rescued by Libyan Coast Guard+ died+missing*1000)

Observations

- The standardized adverse sea outcomes (deaths + missing per 1000 attempted sea crossings) increased by 2.1 fold following withdrawal of Mare-Nostrum and a retreat from dedicated SAR (Triton period).
- In the subsequent humanitarian vessels period these adverse sea outcomes improved significantly (59% decrease from Triton period, Relative risk 0.41, 95% CI 0.23-0.72, P= 0.002).

Public health impact:

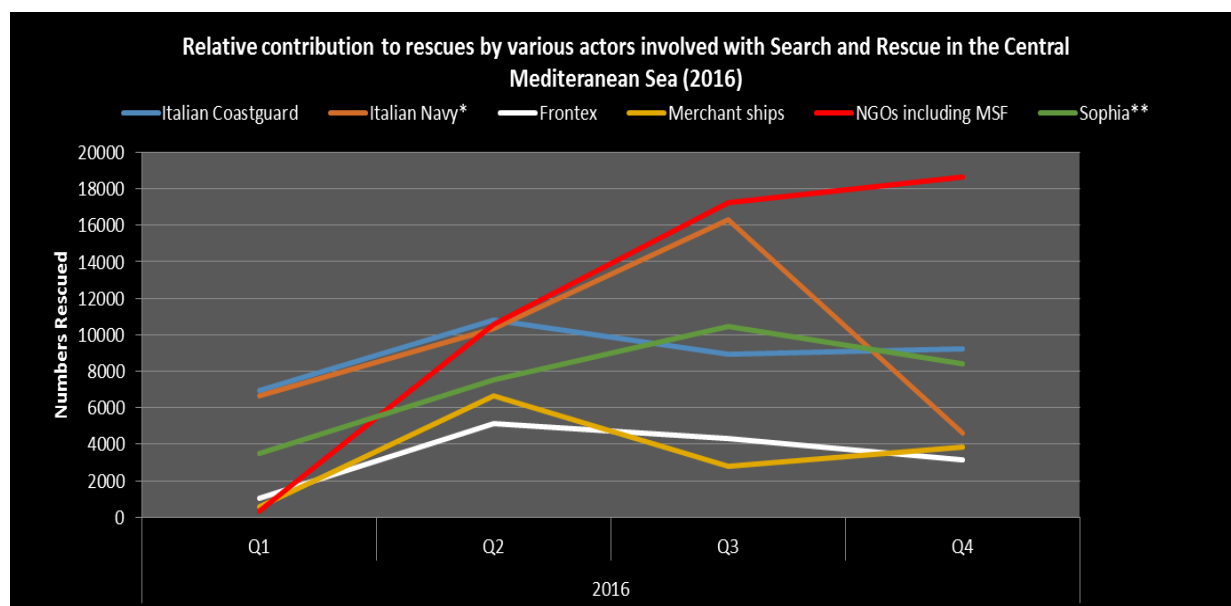
Triton-only period: 1 adverse sea outcome* for every 26 attempted Sea crossings
Humanitarian vessels: 1 adverse sea outcome for every 63 attempted Sea crossings

(*adverse sea outcome=death + missing)

Conclusions

- **The period with the humanitarian vessels was associated with a 59% improvement in maritime safety compared to the Triton-only period. There is also a 16% improvement in relation to the Mare-Nostrum period.**
- The fact that 5315 deaths still occurred in 2016 implies that there are persistent humanitarian gaps in Search and Rescue operations in the absence of safe alternatives, people will continue to lose their lives. Maritime safety needs to be further improved and so too introduction of safe and legal channels for migration to cover these unacceptable deaths.

Figure 3.2. Relative contribution of NGOs to rescues made in the central Mediterranean during 2016?



Source: Maritime Rescue Coordination Committee, Rome.

Observations.

- The relative contribution of NGOs to Search and Rescue in 2016 (Red line) has increased significantly from quarter 1 to Quarter 4 of 2016 (Chi Square for linear trend $P < 0.0001$)

Table 3.2. Relative contribution of humanitarian vessels sea operations to rescues made in the central Mediterranean during 2016

Rescues in 2016 ^a						
	Q1	Q2	Q3	Q4	Total	%
Italian Coastguard	6931	10795	8923	9226	35875	20
Italian Navy	6676	10360	16323	4592	37951	21
Frontex	1028	5107	4309	3172	13616	8
Merchant ships	555	6661	2813	3859	13888	8
NGOs including MSF	323	10563	17267	18653	46806	26
Sophia ^b	3510	7531	10476	8396	29913	17
Total					178049	

^aData on rescues before 2016 stratified by actors was not available

^bIncludes other military boats

Observations.

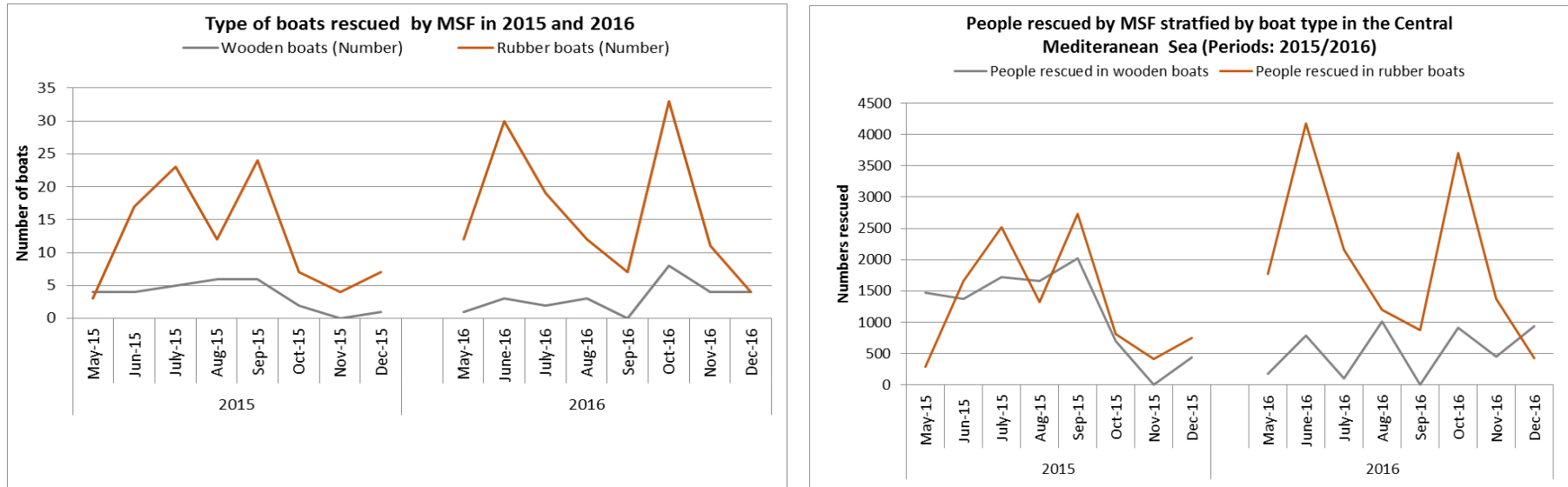
- 46,806 (26%) rescues (roughly one in three) were conducted by humanitarian vessels boats and they were the most important single actor in 2016. MSF did 21,224 of these rescues

General Conclusions

- **Data from 3.1 and 3.2 above rebuts the accusation by politicians and the media that dedicated Search and Rescue operations have contributed to deterioration in maritime safety. On the contrary they have played a crucial life-saving role.**

FOCUS ON MSF

Figure 3.3a. Trend in “type of boats” and “people rescued” by MSF during 2015 and 2016.



Observation

- There is an increased trend in numbers of rubber boats and people rescued by MSF in 2016.

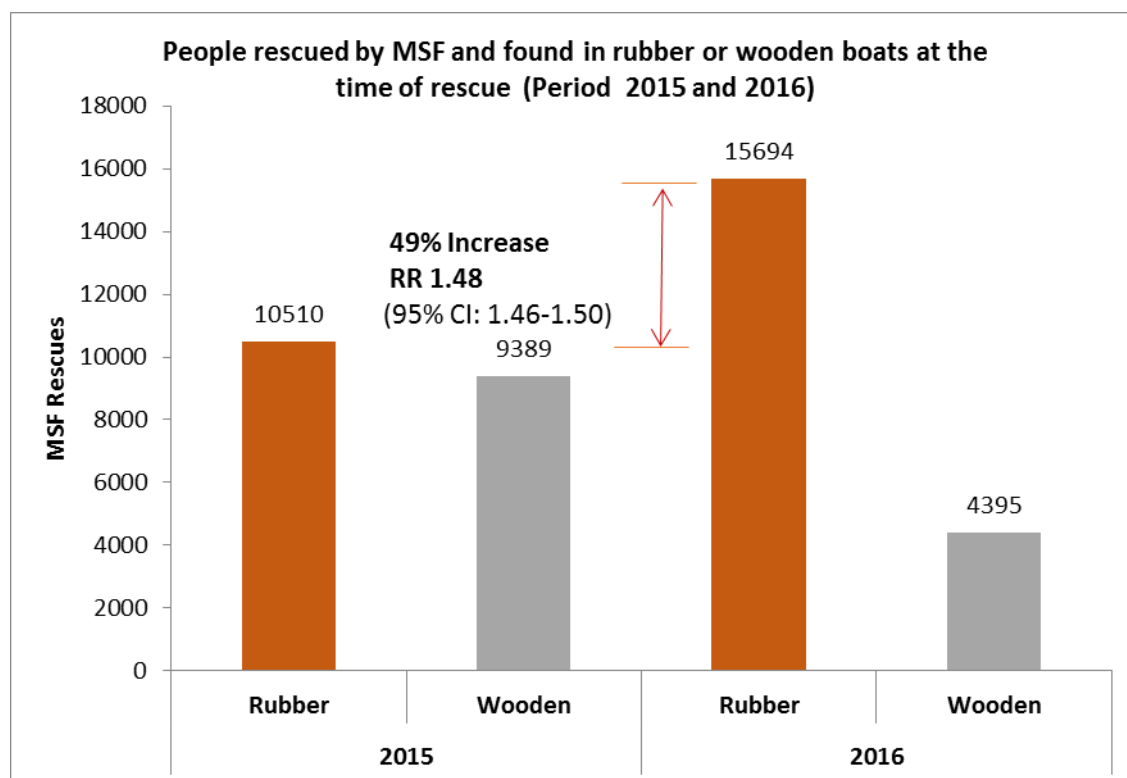
Table 3.3. “Type of boats” and “people rescued” by MSF during 2015 and 2016.

	Boat type	Number of boats n (%)	People rescued n (%)	Average people/boat
2015	Rubber	97 (78)	10510 (52)	108
	Wooden	28 (22)	9389 (48)	335
	Total	125	19899	
2016	Rubber	128 (84)	15694 (78)	122
	Wooden	25 (16)	4395 (22)	176
	Total	153	20089	

Observations

- 153 boats were rescued by MSF in 2016 compared to 125 in 2015 (a 22% increase in rescue of boats in distress). In 2016 there were also more boats but almost the same overall numbers of people rescued (19899 in 2015 compared to 20089 in 2016).
- 2016 saw a 6% increase in numbers of rubber boats rescued (78% to 84%) but the number of people found in rubber boats in 2016 was 26% higher than in 2015.
- The average number of people in rubber boats also increased by 13% (to 122/boat) in 2016 (compared to 2015). As the capacity of rubber boats is estimated at 25-60 persons (for a 8-11 meter boat), estimated overloading is 2 to 5 fold!. These rubber boats are also considered less robust and likely to deflate rendering them a serious risk for those on board.[12]

Figure 3.3 b. Type of boats and numbers rescued by MSF



Observations

- The Relative Risk of being rescued by MSF in a rubber boat in 2016 compared to a wooden boat was 1.48 (95% CI=1.46-1.50, $P < 0.001$) – implying a 48% increased probability of finding people in rubber boats at the time of rescue in 2016.

Possible reasons for increased probability of finding people in rubber boats in 2016

- Operation SOPHIA Phase 2A (High Seas), and Libyan coast guard activities since mid-2016 [7] meant that smugglers can no longer recover wooden or other smuggling vessels on the high seas, rendering them a less economic option for the smuggling business. Smugglers may thus have opted for single-use disposable assets (rubber boats). This was also reported by EUNAVOR MED[10]. Rubber boats (made in China) are available at 300-800 USD on Alibaba.com.[12]
- Destruction of wooden boats by Operation Sophia may also have reduced the general availability of wooden boats.[7,10]
- The presence of SAR assets closer to the Libyan coast may also have influenced smuggler practices but we have no specific data to substantiate this claim.



Human traffickers are using rubber dinghies which are available for a few hundred dollars https://www.alibaba.com/product-detail/High-Quality-Refugee-Boat-Inflatable-Pontoons_60606629063.html



Advert on refugee boats Made in China on Alibaba.com. https://www.alibaba.com/product-detail/High-Quality-Refugee-Boat-Inflatable-Pontoons_60606629063.html

3.4. Is geographic positioning of MSF close to the Libyan coast justified?

Figure 3.4a. Geographic representation of adverse sea incidents and deaths/missing (May 2015-December 2016) – please click on PDF insert below. (Total number of incidents at sea = 162)



Fig_3.4a_sea_incidents_SAR_A1_170630

Figure 3.4b. Geographic representation of MSF rescues (May 2015-December 2016) – please click on PDF insert below.



Fig 3.4b.
MSF_rescue_A1_170

Observations

- There is a diffuse spatial distribution of adverse sea incidents in the entire Central Mediterranean with clustering close to the Libyan border particularly around Az Zawyah and Tripoli.
- **Of 162 sea incidents, 67(41%) were located in areas where MSF conducted rescues. This implies that MSF is operating in areas of higher danger and imminent loss of lives.**
- The fact that incidents are also happening in high seas (Fig 3.4a) still raises a question of geographic equity and the need to consider rationalization of search and rescue operations with other partners.

Conclusions

- MSF dedicated search and rescues are clustered around the same area of considerable clustering of adverse sea incidents (including shipwrecks). Current positioning would thus maximize the “preventive effect” on deaths.
- Furthermore, 84% of boats in 2016 were rubber boats that were overcrowded to up to 5 fold their capacity. **Within this back-drop, EUNAVFOR MED has recognized that migrant vessels are to be considered in distress according to international conventions from the moment they launch.[7,10] Moving NGO SAR assets closer to the Libyan coast thus responds to a pre-emptive humanitarian imperative.**

GENERAL CONCLUSION/ KEY MESSAGES

Have humanitarian vessels including NGOs like MSF been “pull factor” for migration?

- The pattern of attempted sea crossings during Mare-Nostrum, Triton-only and humanitarian vessels periods suggests a temporal/seasonal migration. In effect, people are attempting sea crossings and are not deterred by the type of sea operations present. “Push factors” or drivers of migration such as conflict, prosecution, drought and poverty are likely to be playing an important role within a complex milieu of other factors associated with migration.
- If the ‘pull factor hypothesis’ had grounds, the total number of attempted sea crossings should be considerably higher during the humanitarian vessels period compared with the equivalent period of Triton-only. This was not the case, negating the hypothesis that the dedicated search and rescue was the main incentive (pull factor) for migrants/refugees.
- Continued increase in migration in the Western Mediterranean route by 46% (data not presented in this report) where there are no dedicated Search and Rescue operations adds support to this thinking.

Has dedicated Search and Rescue operations contributed to a deterioration in maritime safety?

- The humanitarian vessels involvement was associated with a significant improvement in maritime safety compared to the Triton-only period. Standardized adverse sea outcomes (deaths + missing) fell significantly from 39/1000 attempted sea crossings to 16/1000 during Triton – a 59% improvement in maritime safety.
- The humanitarian boats also rescued 46,806 people (a corollary manner of looking at this would be to consider them “averted deaths”). Without these boats, the numbers of death and missing at sea” would have been considerably higher.

Is the positioning of MSF boats close to the Libyan coast justified?

- Of 162 adverse sea incidents that happening during the humanitarian vessels involvement period, 67(41%) were located in the MSF positioned area (around Az Zawyah and Tripoli).
- In 2016, the great majority (84%) of boats rescued by MSF were overcrowded rubber boats floating with a load that was 5 fold their capacity. With such degree of overloading, migrant vessels are to be considered in distress according to international conventions [13]from the moment they launch. Moving rescue ships closer to the Libyan coast thus responds to a pre-emptive humanitarian necessity.

REFERENCES

1. MOD Italian Ministry of Defence. Mare Nostrum Operation, 2013. Available: <http://www.marina.difesa.it/EN/operations/Pagine/MareNostrum.aspx> (Accessed 10th May 2017).
2. Guardian T Lampedusa shipwreck: Italy to hold state funeral for drowned migrants, 2013. Available: <https://www.theguardian.com/world/2013/oct/09/lampedusa-shipwreck-italy-state-funeral-migrants> (Accessed 10th May 2017)
3. EU Frontex Joint Operation 'Triton' – Concerted efforts to manage migration in the Central Mediterranean, 2014. Available: http://europa.eu/rapid/press-release_MEMO-14-566_en.htm (Accessed 10th May 2017).
4. EU European Union External Action , 'Factsheet European Union Naval Force: Mediterranean Operation Sophia': Available: http://www.eas.europa.eu/csdp/missions-and-operations/eunavfor-med/pdf/factsheet_eunavfor_med_en.pdf.
5. EU Speech by President Jean-Claude Juncker at the debate in the European Parliament on the conclusions of the Special European Council on: 'Tackling the migration crisis', 2015. Available: http://europa.eu/rapid/press-release_SPEECH-15-4896_en.htm (Accessed 10th May 2017).
6. Bourbon. Bourbon Argos: Mediterranean rescue operations 2017. Available: <http://www.bourbonoffshore.com/en/offshore/bourbon-argos-mediterranean-rescue-operations> (Accessed 10th May 2017).
7. Heller C, Pezzani L Blaming the rescuers, criminalizing solidarity, re-inforcing deterrence, 2017. Available: <https://blamingtherescuers.org> (Accessed 13th June 2017)
8. Xinhua Controversy over migrant-rescue NGOs heats up in Italy, 2017. Available: http://news.xinhuanet.com/english/2017-05/03/c_136252013.htm (Accessed 10th May 2017).
9. EU European Union Committee. Operation Sophia, the EU's naval mission in the Mediterranean: an impossible challenge. Available: <https://www.publications.parliament.uk/pa/ld201516/ldselect/ldcom/144/14402.htm>
10. EU (2016) EuNavForMed operation (Ops SOPHIA), - WikiLeaks release: February, 17th 2016. Available: <https://wikileaks.org/eu-military-refugees/EEAS/EEAS-2016-126>.
11. SOPHIA Operation Sophia, the EU's naval mission in the Mediterranean: an impossible challenge. Available: <https://www.publications.parliament.uk/pa/ld201516/ldselect/ldcom/144/14402.htm>.
12. Made in China: 'Refugee boats' available on Alibaba.com. Available: http://www.maltatoday.com.mt/news/national/76525/made_in_china_refugee_boats_available_on_alibabacom#.WV-eB4SGPiw.
13. SOLAS SOLAS Convention: Available: https://en.wikipedia.org/wiki/SOLAS_Convention.