



## *IMP-MED Technical Assistance Project*

# Traffic Regulation Scheme offshore Aqaba Pre-feasibility study

**Jordan JOR 1**

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[www.imp-med.eu](http://www.imp-med.eu)



# Summary



Traffic regulation and IMP MED scope

Aqaba : traffic regulation issues

Other maritime and coastal issues

Regulation: possible options

Conclusions and recommendations



# IMP-MED Project and traffic regulation



## IMP-MED project: integration, not sectoral issues

- Purely sectoral issues normally not addressed
  - *E.g. transport, fisheries...*

## But sectoral issues related to integration are in the scope

- **Cross-sectoral** maritime issues
  - *E.g. fishing/shipping, yachting/fishing, O&G and navigation, risks...*
- **Environmental** integration issues
  - *E.g. : sectoral impacts all acceptable, cumulative impacts not acceptable...*
- **Land-sea** issues
  - *When a maritime solution causes problems on land, or vice-versa*

## Maritime traffic regulation is directly concerned

- Management of space, competition, safety, environment, ports...
- International concerns and issues
  - *Regional, maritime transport and IMO*



# Jordan Maritime Area : a very good case

Very small area

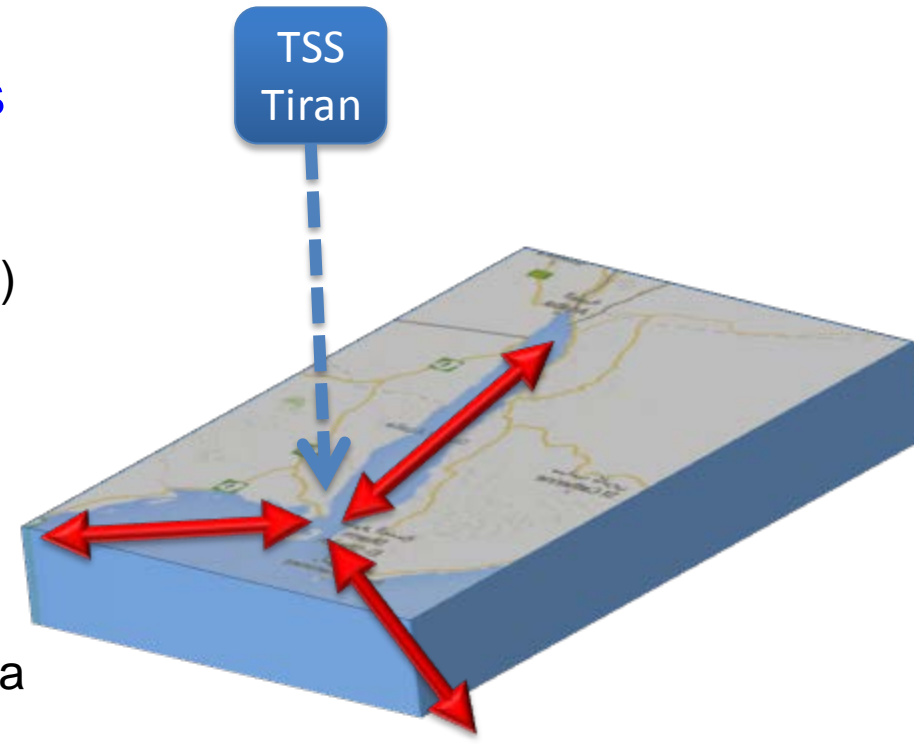
Many maritime and coastal issues

- Only coastal area in Jordan
- Maritime transport (O&G, chemicals, goods, raw materials...)
- Cruises, passengers traffic across
- Tourism (beach, diving...)
- Fishing
- Conservation issues

Serious concerns

- Maritime traffic in the Gulf of Aqaba is not regulated
  - TSS in the Strait of Tiran
  - No other regulation ...
- All ships go to the ports at the end of the Gulf
  - Wait to berth, often adrift

**Suez**



**Red Sea**

# TSS and integration

## Main issue for TSS is maritime safety

- Safe access to ports and waiting zones
- Interactions with local maritime traffic and activities

## Additional issues related to traffic regulation

- Management of maritime activities in constrained space
- Better management of port installations
- Optimal use of scarce maritime space
- Long term management of environmental impacts
  - *Impacts of shipping, cumulative impacts with other activities*

## TSS in IMO concept is focused on maritime safety

- safety of life at sea (SOLAS)
- Reduction of risks and impacts related to navigation (in fact, shipping)

## TSS in IMP is a (major) component of maritime spatial plan

- It should be developed taking into account the wide image
- It is not just a way to deal with existing activities, but it is a way for coastal States to organize future activities

# Traffic regulation issues in Aqaba



## Aqaba maritime area is essential for Jordan economy

- Only maritime/coastal zone, many economic maritime issues
- Shipping
  - *oil, LNG, chemicals, containers, ferries*
- Cruises
  - *Driver for many other economic activities*
- Tourism based on maritime assets (beaches, reefs)
  - *Bathing, diving, coastal tourism*  
Hotels and resorts (megaprojects), diving, leisure, yachting...

## Very small area

- Very busy
  - *Many ships and boats...*
- Very large vessels, with dangerous cargoes
  - *Risks, impacts (environment, tourism : noise, landscape...)*

## High environmental assets

- E.g coral reefs...



# Main challenge : safe and efficient access to Aqaba ports



## Three ports

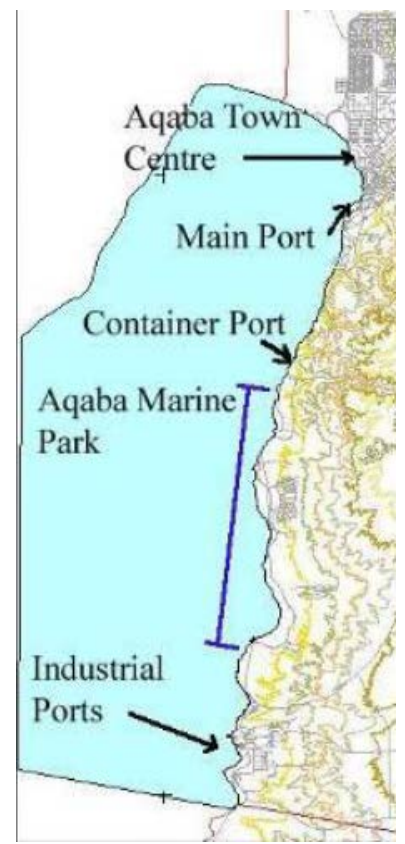
- Main (close to the city), Middle (containers, ferries), South (industrial)

## Development and evolutions

- Relocation of some activities from main port to South port
- Cruise terminals in main port
- Development of container terminal in Middle port
- Extensions in South port

## Consequences

- More traffic
- Larger ships
- Dangerous cargoes



# Current situation

## No traffic regulation scheme for access to ports

- Large area
- No coordination between regulation authorities (ports)
- Risks (collision, blackout...)

## Response plan not optimized

## Shallow water moorings only

- No offshore moorings because of depth
- Risks, impacts (noise, pollutions, destruction of marine habitats...)
- Many ships : immobilisation of valuable coastal space

## Drifting ships

- Waiting for berth in Aqaba (Eilat ?)
- Additional risk, inefficient way of using scarce space (large free zones)
- Drifting vessels in a large area (EG, JO, SA, IL)





# The pre-feasibility study has considered 4 strategic options



## National scheme

- Limited to national maritime area

## Bilateral scheme

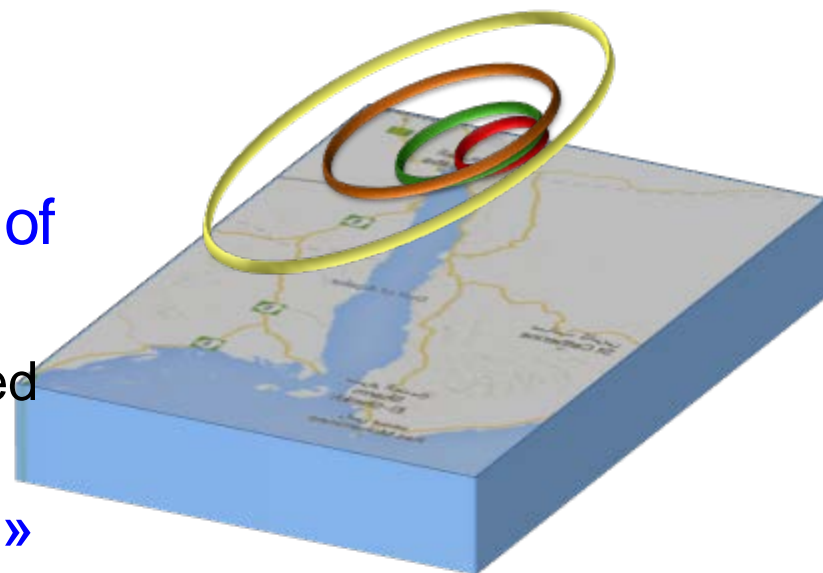
- Coverage : end of the Gulf

## Multilateral scheme (for the end of the Gulf of Aqaba only)

- Including approaches and related issues

## Multilateral « Maritime Highway » for Strait of Tiran to Aqaba

- Addressing all the traffic issues in the Gulf of Aqaba



# Option 1: National Jordanian scheme



## Bound to national maritime area

- Two lanes, Jordanian side
- Jordanian regulation

## Access to Aqaba ports only

- Should include deep water moorings and regulation of mooring/waiting areas

## Pros

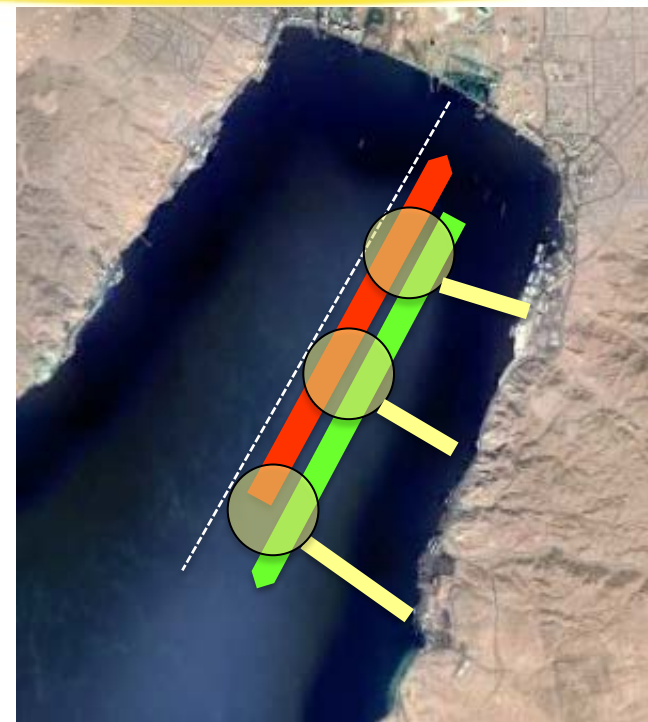
- Easy to create, easy to manage

## Cons

- Sub-optimal use of scarce maritime space
- Lanes close to the shore (impacts, risks)
- Two independent traffic management schemes in the same area...

## Risks

- Limited : should be accepted by IMO MSC
  - *Located in territorial waters, no agreement needed...*



# Option 2: Bilateral Regulation Scheme



## Coverage : end of the Gulf of Aqaba

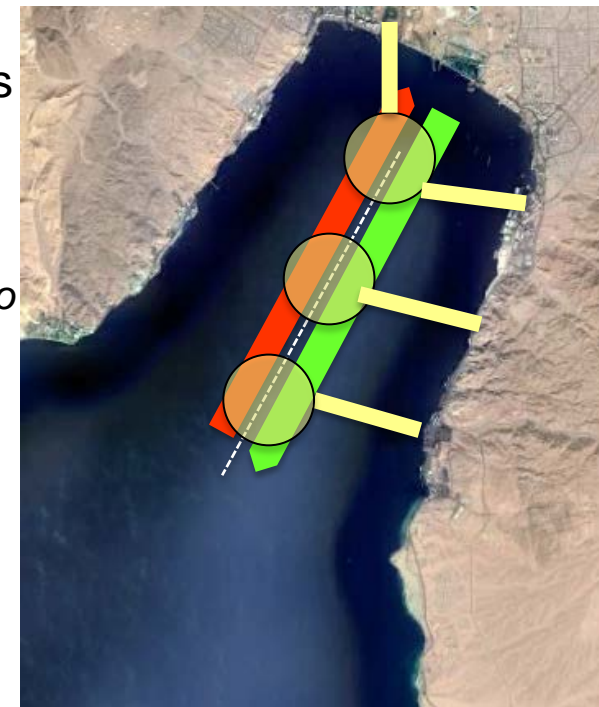
- Joint scheme Jordan-Israel
- Access to Aqaba and Eilat ports
  - *Two lanes, one in Jordanian waters, one in Israeli waters*
  - *3 turning areas, 4 access channels*
- Common management of moorings/waiting areas (including deep moorings)

## Pros

- Best way of managing the area
  - *Save scarce maritime space (one scheme, only two lanes rather than four)*
- Safer than two independent schemes
  - *Joint management of all traffic to/from the ports in the North of the Gulf, consistent contingency plans...*
- Existing experiences : e.g Dover TSS

## Cons

- Not simple, political support needed
  - *Agreement or MoU?*
- Specific issues
  - *VTS cooperation, enforcement*
- Still partial vision: regulation problems extend beyond this zone



# Option 3: Regional scheme, end of the Gulf of Aqaba



## Joint scheme, four countries

- Regulation including the southern approaches to the area (Egypt and SA territorial waters)
  - *Regulation, moorings, drifting, surveillance, contingency/response plans*

## Difficult, but not impossible

- Could be agreed at *technical* level, not political
  - *Technical provisions applied at local regulation level*
- Alternatively, political agreement between JOR, EGY, SAR
  - *Agreement between 3 countries in the framework of the Jeddah Convention plus technical agreement between Jordan and Israel...*

## Pros

- Improvement management
  - *Include drifting areas in Egyptian and Saudi Arabian waters*
- Optimisation
  - *Information, contingency and response plans*

## Cons

- More difficult (political issues), more complicated (wider scope)



# 4th option: Maritime Highway in the Gulf of Aqaba



- MH : Continuous recommended routeing scheme with permanent monitoring of large vessels traffic and coordinated services and contingency/response plans

## Regulation of traffic along the Gulf of Aqaba

- From Strait of Tiran to the northern end of the Gulf

## Three TSS + strongly recommended lanes

- Tiran, **XXXXXXXX ?**, Aqaba

## VTMIS

## Common regulations

- MoU between 4 countries
  - *Alternatively, agreement between JOR, EGY and SAR in the framework of the Jeddah Convention plus bilateral agreement between Jordan and Israel ?*
- Enforcement; coordination

## Pros

- Optimal, safest scheme
  - *Coordination of traffic monitoring, information sharing, contingency and response plans and equipments...*
- Strong political option

## Cons

- Likely not to be supported by IMO
  - *But the MH should be entirely in territorial waters...*



# Conclusions

A regulation scheme is really needed for the area

But the problem is wider

- Common to both sides of the end of the Gulf
- With direct and indirect consequences (risks, impacts) in other neighbouring countries

## Recommendation

- Start by bilateral part
- Study a more general solution, if possible at the scale of the whole Gulf
  - *Maritime Highway is a challenging but powerful concept*
  - *Could be developed in the framework of Jeddah Convention*
- Consistent with short term solution of most of the Jordanian issues
  - *The Jordan regulation scheme can become the starting point for a regional regulation scheme*
- Consistent with the planned development of maritime activities in the area



# Other general recommendations

## In all cases, the regulation scheme should be the backbone of a wider Maritime Master Plan

- Consistent regulation of all maritime activities in Jordan waters;
- Based on foresight vision (**future** activities)
- Inclusive risk and impact assessment (SEA)
  - *Risk assessment should extend beyond Jordan waters*

## Coordination with neighbouring coastal States needed

- *Minimum*: consultation
- *Best*: joint study of some issues
  - *Regulation, drifting, maritime surveillance, deep water moorings*
  - *Risk assessment, contingency and response plans*

## Consistency with land master plan is required

- Small area, many coastal assets threatened by shipping
  - *Environment, landscape, coastal tourism, diving...*

## Include other issues

- SAR, contingency plans, surveillance and monitoring

# Way forward?

## Decide which option

- National, local, regional, maritime highway
- Or which options
  - *E.g. : bilateral now (short term), MH on long term*

## Identify a leading organization

- And a supporting technical body

## Create a governance structure

- Such as Project Steering Committee
- Or empower an existing/future maritime governance structure

## Initiate additional studies

- « Mapping » of existing and future activities
- Risk assessment
- Strategic Environmental Assessment





# Thank you

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