

OA support to Combined Maritime Forces

William Wardrop* and Matthew MacLeod#

* Maritime Warfare Centre / Dstl

DRDC – Centre for Operational Research and Analysis

32 ISMOR

Outline

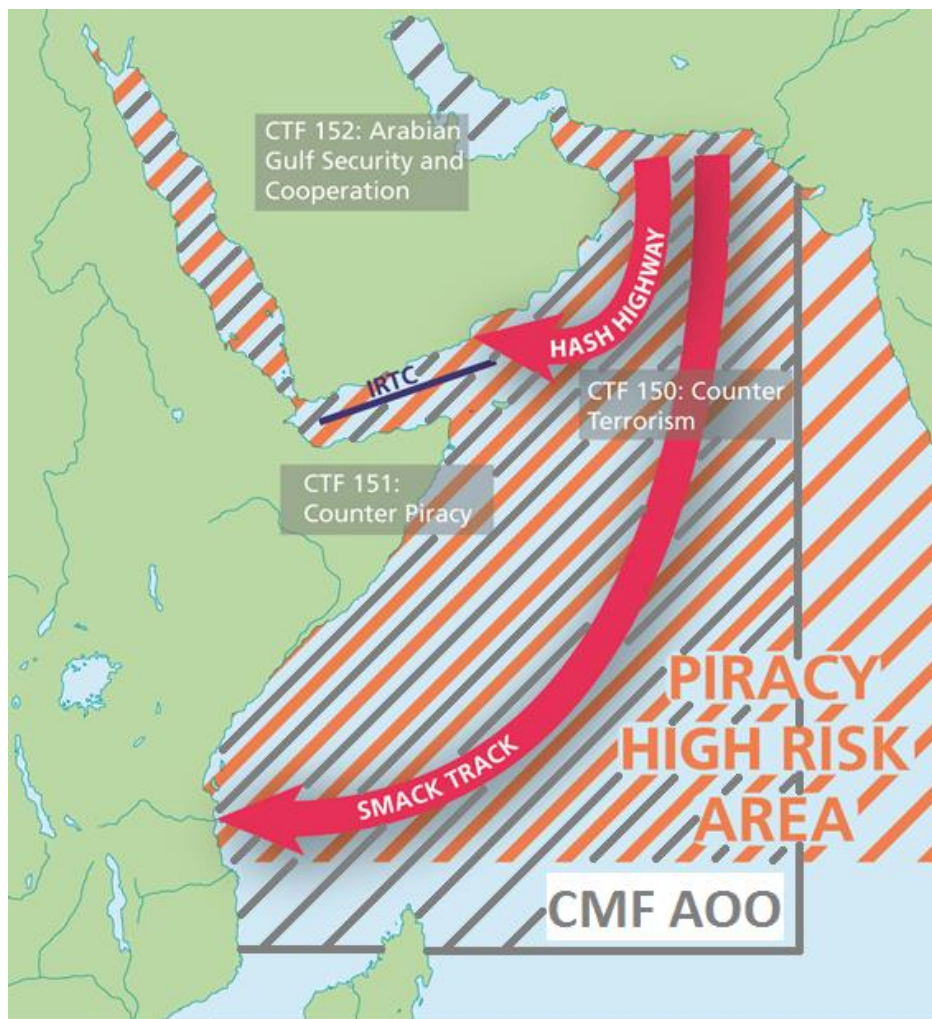
- Overview of Combined Maritime Forces
- Counter Piracy
- Counter Narcotics
- Pattern of Life

What is the Combined Maritime Forces?

- CMF is a 30-nation partnership conducting maritime operations in the Middle East commanded by US Navy Vice Admiral.
- CMF's members are not bound by a shared political mandate but are subject to international and national laws and a UN framework. Therefore no member state is asked to carry out a duty it is unwilling or unable to conduct.
- Subordinate Task Forces execute the missions:
 - Counter Terrorism (CTF150)
 - Counter Piracy (CTF151)
 - Arabian Gulf security and cooperation (CTF152)



CMF Area of Responsibility



CMF Area of Operations
IRTC = Internationally
Recognised Transit Corridor

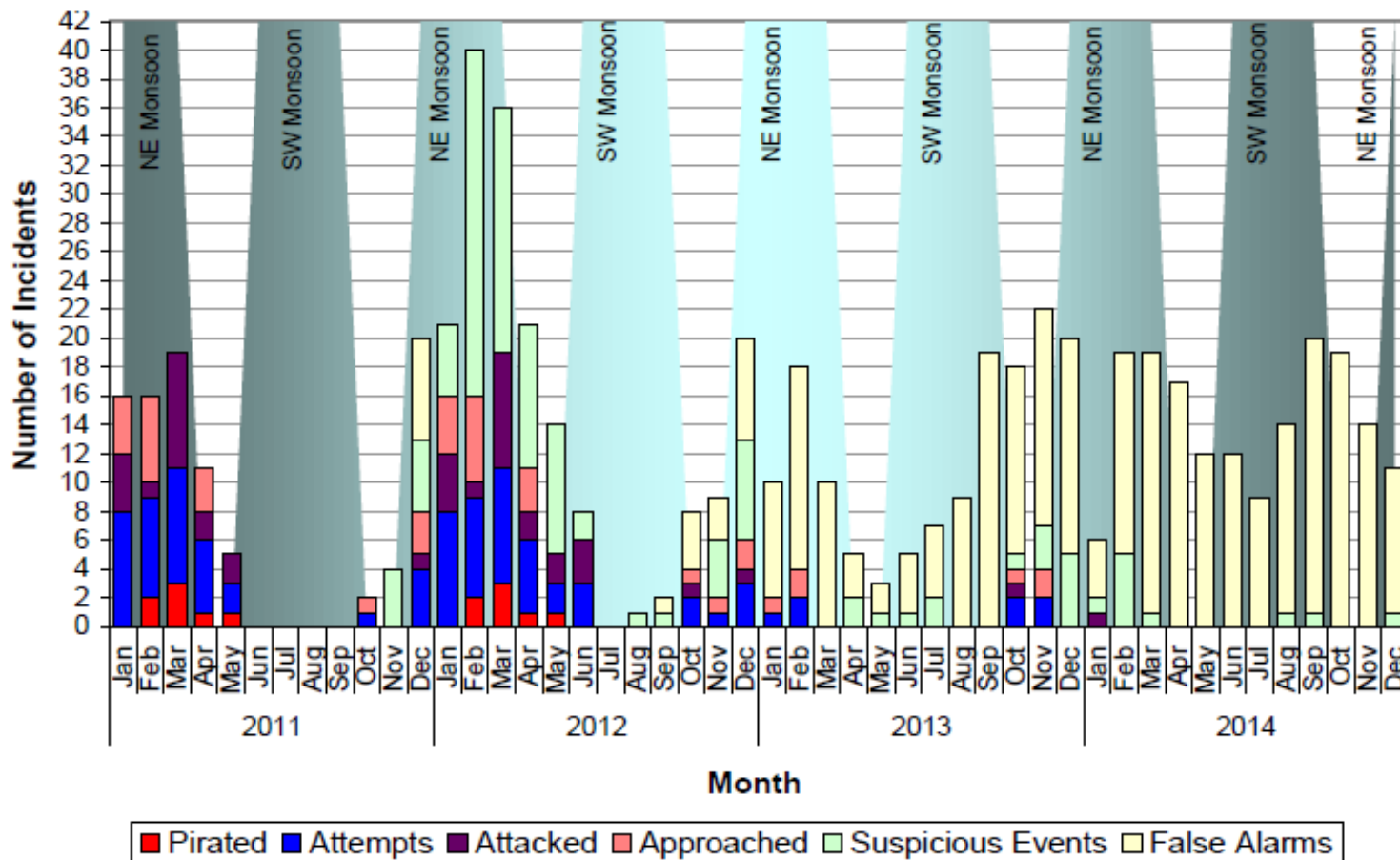
Counter Piracy / CTF151

Problem Set

- Piracy emerged after years of limited governance in Somalia; initially as a response to foreign encroachment on fishing grounds.
- OA support to counter piracy planning:
 - Forecasting of piracy risk dependent on: historical rate of attacks; density of traffic and weather conditions.
 - Definition of patrol areas in the Internationally Recognised Transit Corridor (IRTC).



Piracy Incidents 2011 - 2014





Counter Piracy / CTF151

- A peak in attacks was reached several years ago; the last successful pirate attack against a large commercial vessel was in May 2012.
- Reduction due to combination of factors:
 - Presence of Military Forces
 - Adoption of Best Management Practices.
 - More Embarked Security Teams
 - Increased security forces ashore
- However, threat of piracy not gone whilst the maritime military presence is reducing (e.g. NATO intermittent deployment)

Counter Terrorism / CTF150

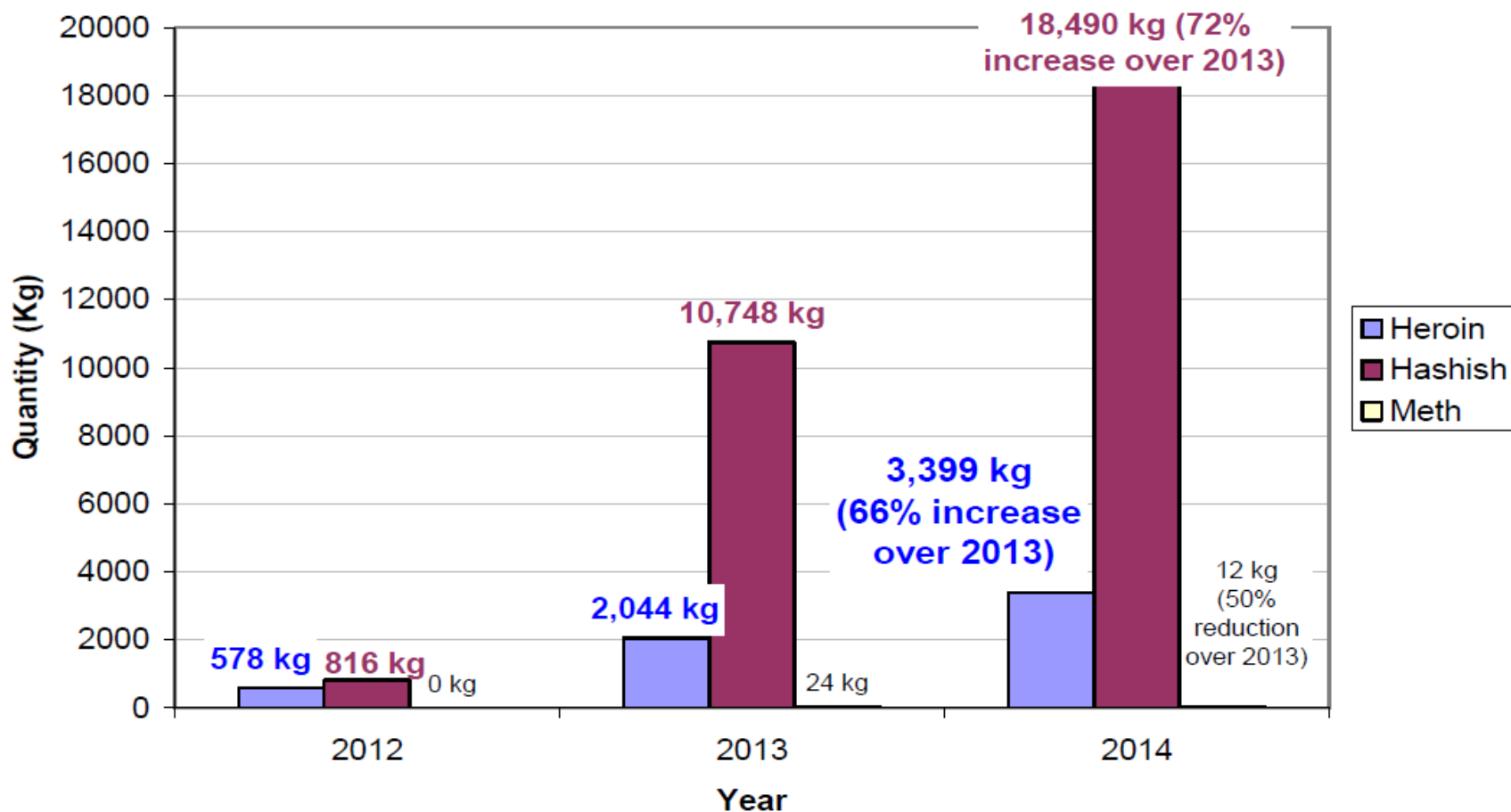
"While it is difficult to establish how widely terrorist groups are involved in the illicit drug trade, or the breadth and nature of cooperation between these two criminal groups, the magnitude of the numbers involved make the relationship worrisome."

UNODC Senior Terrorism Prevention Officer

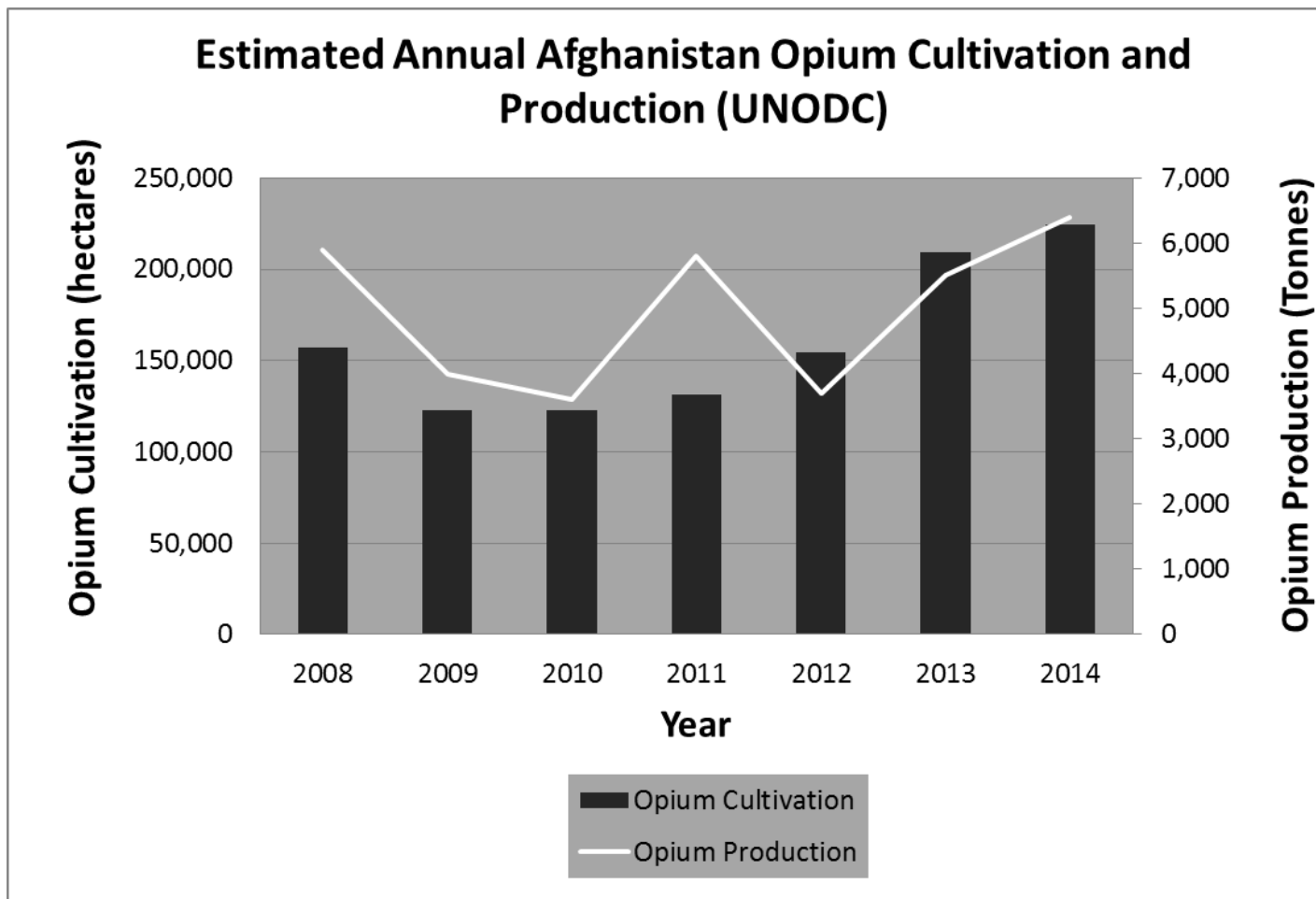


HMAS Darwin seized over a tonne of Heroin (23 April 2014)

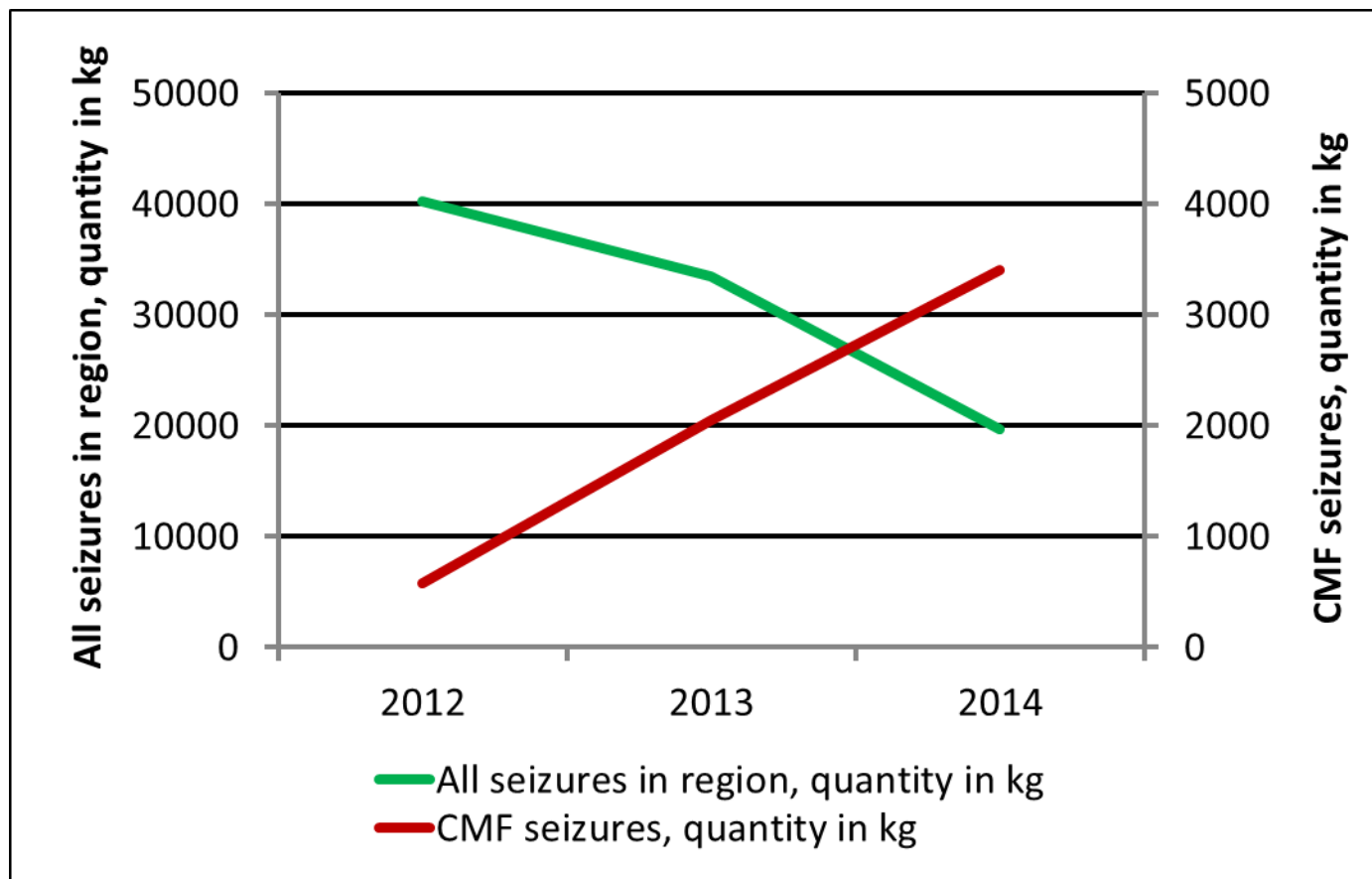
CMF Drug Seizures 2012 - 2014



Opium cultivation and production



Regional and CMF Heroin Seizures





Pattern of Life Process: Problem Set

- Large and extremely complex body of water
 - Previous TREAD work at Centre for Maritime Research and Experimentation (CMRE)¹ identified the Indian Ocean as most challenging sea area in which to algorithmically learn routes.
 - Massive petroleum and container trade.
 - Shifting fishing grounds in territorial waters and high seas.
 - Three major choke points - close to 5 million barrels of crude oil and petroleum products transited through Bab el-Mandeb Strait in 2014².
 - Routes affected by monsoon seasons and perceived piracy risk, as well as shifting economic factors.
- CTF 150 particularly concerned with small, difficult to detect vessels not required to broadcast on AIS – need to find anomalies amongst much legitimate fishing and shipping traffic.
- Wide variety of reporting units – maritime patrol aircraft, Naval and Coast Guard

Pattern of Life Process: Problem Set

- “Most heroin from Afghanistan travels to Europe by two main routes... Stricter border-security checks along the Balkan Route, combined with the increasing risk... have made the overland passage less attractive.”
- “Shipments of heroin are unloaded from dhows and cargo ships off the shores of Kenya and Tanzania, and taken ashore on small speedboats. They are then broken up into still smaller packages before being taken by ‘mules’ to Europe.”



Members of HMCS Toronto's naval boarding party board a suspected drug smuggling vessel while a CH-124 Sea King helicopter provides additional security in the Arabian Sea region in this Jan. 17, 2014 handout photo.

“The Smack Track: Heroin Smuggling is Undermining African Countries,” The Economist, 18 Jan 2015.



Assets

- Large number of contributing nations, many of whom know the area well
- Partnerships, particularly on counter-piracy
- Infrastructure support from US
- Large number of highly detailed After Action Reports from boardings



Pattern of Life Challenges

- Knowledge management: High handover rate of most CTF commands and CMF staff
- Reporting and analysis tools: varying capability of users can mean lowest common denominator (e.g. reliance on MS Office)
- Information management: high volume of data without proper tools to store, manage, and analyse
- Structure of organization: CMF flexible structure leads to less of a focus on permanent infrastructure



Interest / Opportunities

- Increased use of unclassified / open data
- Closer cooperation / standardization between CMF / NATO / EU to share reports and maximize limited resources over large area
- Analysis products for greater Indian Ocean area
- Tools and methods for small vessels



Impact

- OA informs both definition and reporting on achievement of CMF's annual objectives.
 - Cdre Keith Blount (Jan 2015): “the team provided some in-depth assessment of how CMF has performed in 2014 against the objectives set in the Annual Review Paper.”
- Embedded OA has provided direct support to CTF commanders on asset allocation, understanding of trends.
- Creating opportunities for more countries' analysts to contribute – many common interests in the region.

Questions