



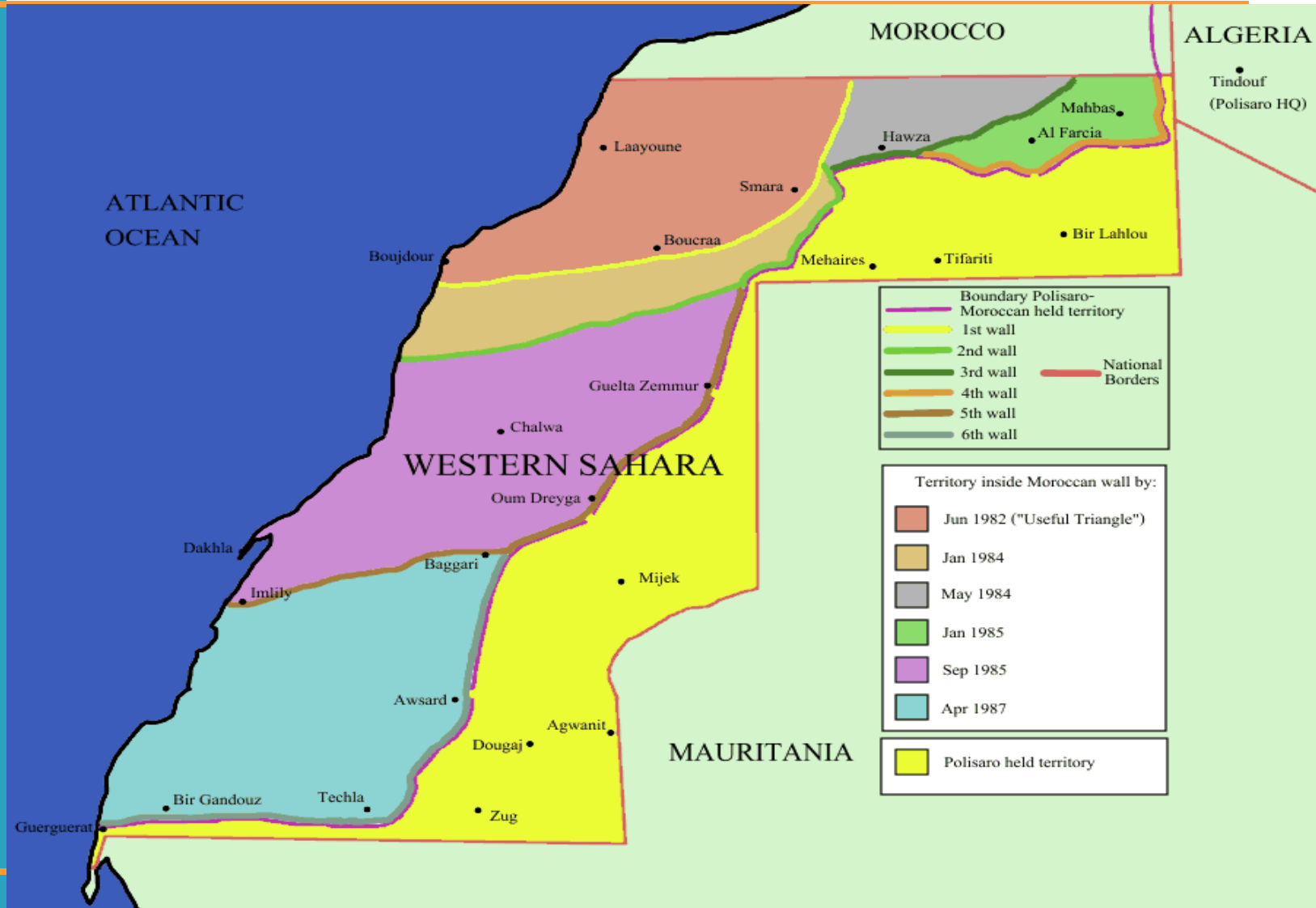
Scope Of the Presentation

- ❖ Geographical orientation
- ❖ Contamination or threat
- ❖ Addressing the threat
- ❖ Results



UNMAS

THE UNITED NATIONS MINE ACTION SERVICE







- The **Western Sahara War** was an armed struggle between the Sahrawi Polisario Front and Morocco between 1975 and 1991, being the first and most significant phase of the Polisario-Morocco conflict. The conflict erupted after the withdrawal of Spain from the Spanish Sahara in accordance with the Madrid Accords, by which it gave administrative control of the territory to Morocco and Mauritania, but not the sovereignty.
- During the war Cluster munitions, amongst other weaponry, was used by the Moroccan forces against the POLISARIO.
- The CM used was mainly BLU 63 and MK 118
- A result of the conflict was that the territory was divided in two through an earthen berm that was constructed by Moroccan armed forces.
- Up to today, reference is made to, east of the berm (under MINURSO) and west of the berm (Moroccan controlled)



- In 2006 LMA UK (now known as AOAV) established a presence in Western Sahara and recruited and trained Saharawi staff.
- In Apr 2007, two survey teams graduated with some EOD operators embedded in the teams.
- A Level 1 survey/GMAA was conducted and the results was published in Nov 2009.
- Meanwhile, in February 2008, after an UNMAS assessment in late 2007, a MACC was established with Senior Technical Advisor and a GIS clerk to support MINURSO.



- Survey results recorded:
 - 38 MF
 - 433 UXO locations
 - **158 Cluster strike areas**
- Due to restricted funding, it was decided to address clearance of CM as priority and operations started in late 2008 with two 10-man teams equipped with LLD. BAC approach was adopted.
- Funding was provided from a UNMAS grant and the Lady Diana Trust fund. The UNMAS was provided with precondition of achieving specific productivity.
- Progress was slow and 3.3 million sq m (48 locations) was cleared till Dec 2009.





- ❖ In June 2009 the MACC STA resigned and was replaced only in November 2009. This was a significant setback as there was no technical assistance or oversight for operations.
- ❖ In 2010 AOAV was awarded a contract that required specific productivity to be achieved. The clearance teams was increased to 3 x 10man teams with additional LLD (36% increase in cost)
- ❖ The MAAC expanded and now had a STA, PO IMSMA person and a Ops/QA offr.
- ❖ The MACC and AOAV agreed to adopted new clearance methodology based on what is called “fade out”.
- ❖ Results for 2010 indicated 6.9million sq m cleared (69 locations)

A 109% increase in productivity : 36% cost increase
www.mineaction.org

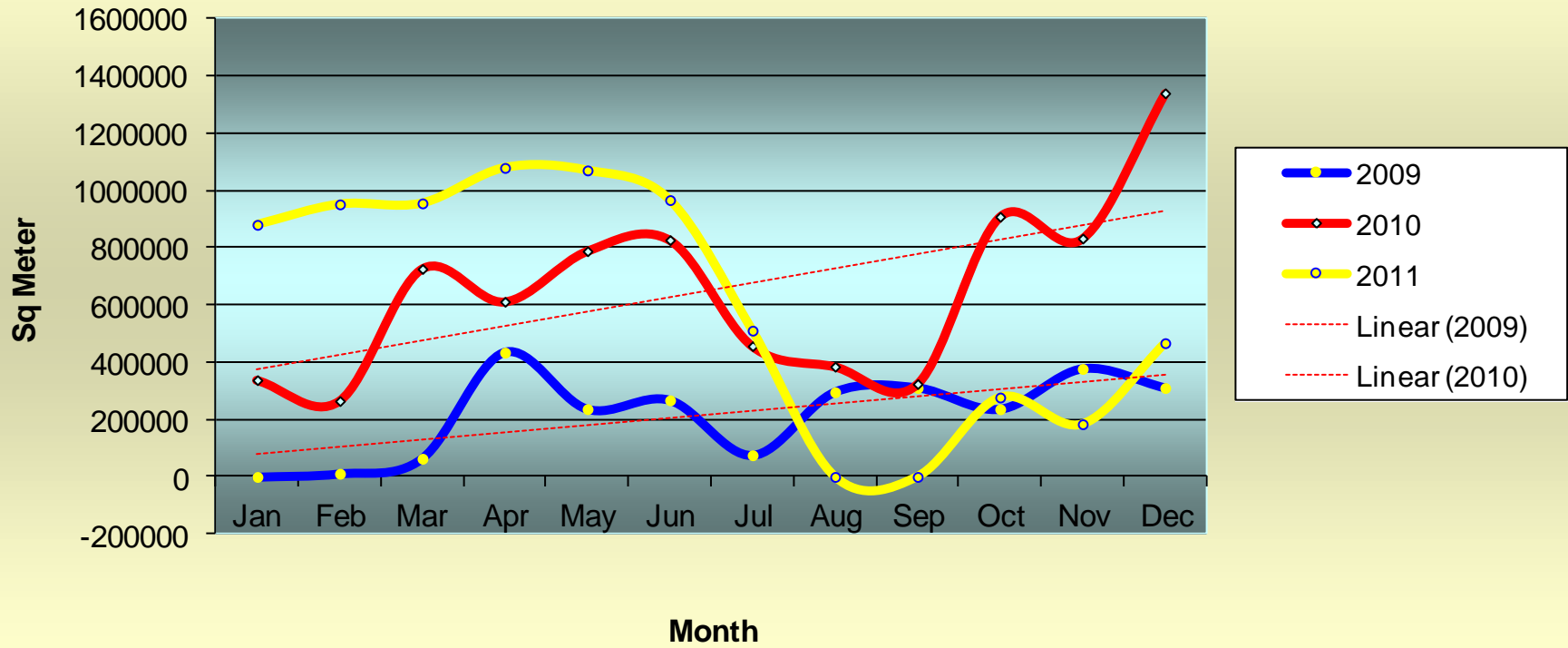


- *Clearance on contract base continued in 2011*
- *6.7 million sq m (71 locations) were cleared despite a 2 month stand down during summer.*
- *To date (march 2012):*
 - *82 more (totalling 230) cluster strike areas were discovered.*
 - *more than 19 million sq m were cleared*
 - *More 12,000 cbu were destroyed*
- *Planning indicates for CM clearance to be completed by June 2012*
- *8.12% of land cleared was sub-surface clearance using LLD.*



Productivity Graph

Monthly productivity





- ✓ Contractual modalities with realistic required achievements was a good option and should be a serious consideration.
- ✓ Good oversight, regular quality control, practical methodologies are important for success.
- ✓ Adopt clearance methods that is practical for the terrain