

## Company Presentation

# Defence

# Security



# Diehl Group

**DIEHL**  
Defence

**Sales: 2.5 billion €\***  
**Employees: 13,300\***  
**Family-owned company since 1902**

\*Trends 2010



**DIEHL**  
Metall

**DIEHL**  
Controls

**DIEHL**  
Defence

**DIEHL**  
Aerosystems

**DIEHL**  
Metering

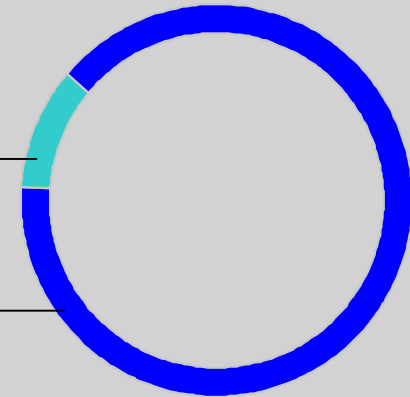
# Corporate Division Diehl Defence



**Sales**            740 million €  
**Employees**    3,190\*  
**Headquarters** Überlingen  
  
\*Trends 2010

**Vehicle Systems (10 %)**

**Defence Systems (90 %)**



# Organisation Structure



## Corporate Division Diehl Defence

Diehl Defence Holding GmbH

**Claus Günther (President)**  
Market / Affiliates/ Defence Systems

**Willi Walgenbach**  
Vehicle Systems

**Thomas Bodenmüller**  
Financial Management

Diehl BGT Defence  
GmbH & Co. KG

Diehl Raytheon  
Missile Systeme GmbH

Diehl Defence  
Land Systems GmbH

JUNGHANS  
Microtec GmbH

AIM Infrarot-Module  
GmbH

GIWS Gesellschaft  
für Intelligente Wirk-  
systeme mbH

EuroSpike GmbH

Diehl Iberia  
Sistemas S.A.

JUNGHANS T2M  
S.A.S.

Diehl & Eagle Picher  
GmbH

RAM-System GmbH

PARSYS GmbH

HIL Heeresinstand-  
setzungslogistik GmbH

DynITEC GmbH

# Defence Systems

## Missile Systems Air



Sidewinder  
Air-to-Air Missile



IRIS-T  
Air-to-Air Missile



FPR  
Air-Combat Training System



IRIS-T SLS Ground-based  
Air Defence System



IRIS-T SL  
Surface-to-Air Missile



Guided Missile  
for Army Air Defence

# Defence Systems

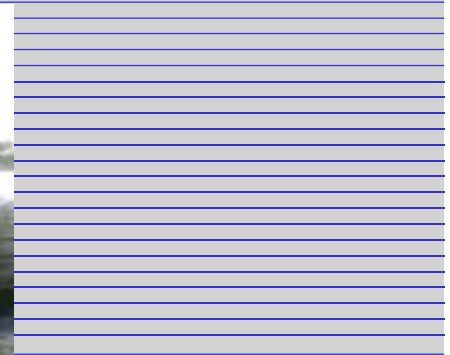
## Missile Systems Land/Sea



Tiger Main Armament



Multi-functional Guided Missile System SPIKE



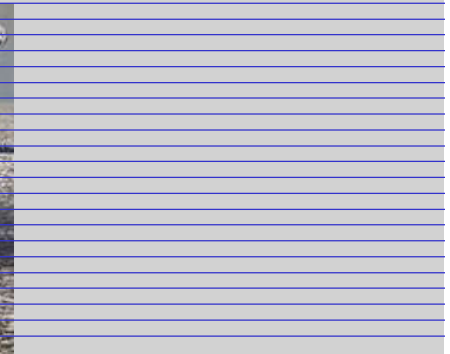
Sea/Land Guided Missile  
RBS15 Mk3



Shipboard Defence System  
RAM



The new Submarine Armament  
IDAS (Project)



# Defence Systems

**DIEHL**  
Defence

## Ammunition & Rocket Systems



Artillery Ammunition  
SMArt® 155



Guided Artillery Rocket  
GMLRS SMArt®



Smoke Products



Diehl Hand Grenades



40 mm Ammunition against  
Infantry Targets



76 mm Naval Ammunition

# Defence Systems

## Sensor & Security Systems



FIRST – Air Surveillance System



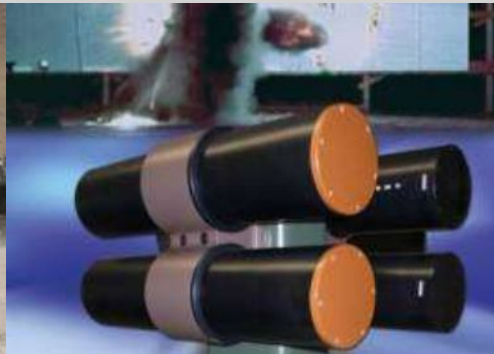
SIMONE – Ship Monitoring System



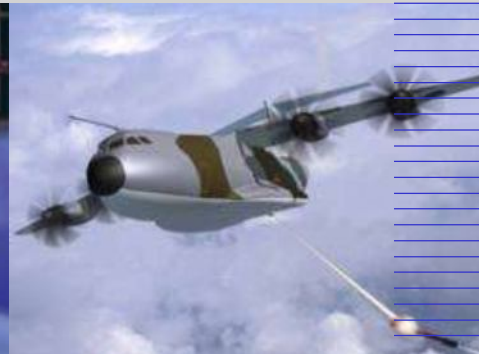
CAMCOPTER S-100 Reconnaissance System



Counter-IED Convoy Protection



Stand-off Vehicle Protection



DIRCM – Protection System for Military and Civil Aircraft

# Vehicle Systems

## Vehicle & Vehicle Protection Systems



Road Tanker  
STW 90



Special Construction:  
Missile Launcher



Repair: Wiesel



Turbine Repair



Remotorisation:  
Power Pack M109



Upgrade/Modification

# Vehicle Systems

## Tracks & Suspensions



Support Rollers



Diehl System Tracks



Sprockets



Quick-Fit Snow Grouser



Segmented Rubber-band Track



Light-weight Track for PUMA

# Operating Affiliates

## Components and Technologies



Mortar Fuzes



Artillery Fuzes



Correction Fuzes for Enhanced Precision



Infrared Modules



Thermal Image Camera HuntIR

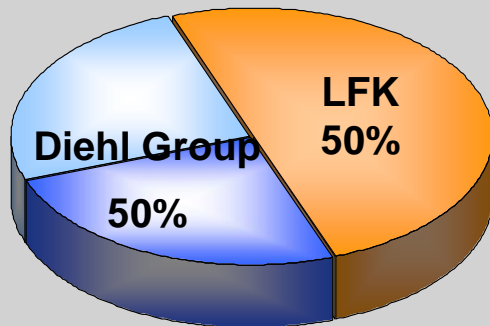


Thermal and Fuze Batteries, Battery Packs

# RAM Systems GmbH – RAMSYS



**RAM-System GmbH was founded in 1985 to manage the German industry sector of the RAM program. Today RAMSYS is the German industrial lead for RAM, SeaRAM, ESSM and SM.**



**DIEHL**  
Stiftung & CO. KG

**LFK-Lenkflugkörpersysteme GmbH**  
- LFK GmbH -

**DIEHL**  
BGT Defence

# RAM – Rolling Airframe Missile

**DIEHL**  
Defence

**Class F 124  
German Frigate Hessen  
with two RAM Systems**



**RAM** is an inner-layer air defense system for effective ship self defense.

**RAM** is deployed on ships of all sizes from Fast Patrol Boats to Aircraft Carriers.

**RAM** is an autonomous, all weather fire-and-forget system comprising a high firepower launcher and a very effective five inch missile with passive radio frequency/infrared dual mode guidance.

- ❖ More than 190 Launcher produced
- ❖ More than 4600 Missiles produced
- ❖ RAMSYS workshare approx. 50%

**RAM Block 2** (4<sup>th</sup> generation missile) under development.



## RAM Fleet worldwide

**DIEHL**  
Defence

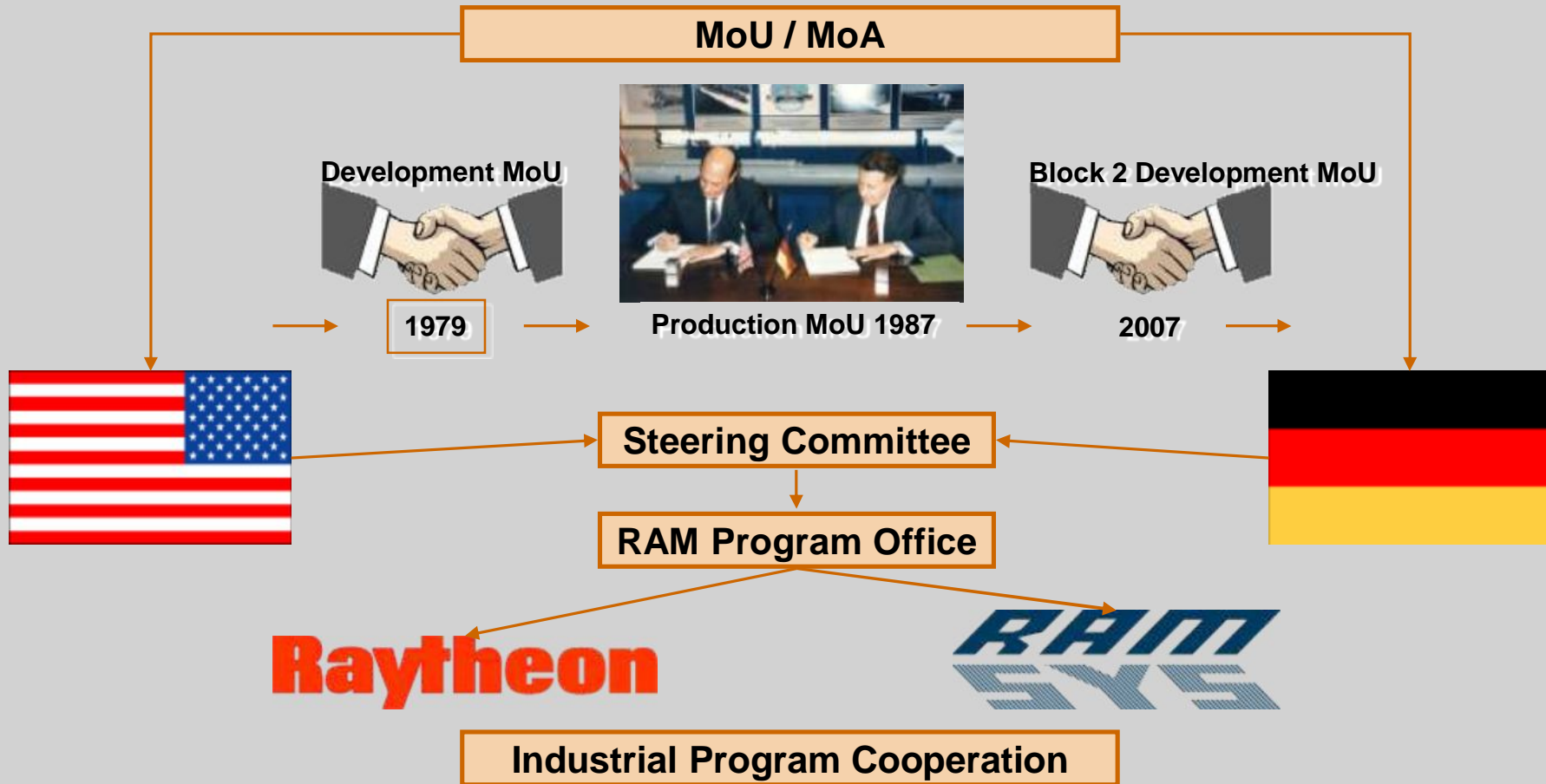


**RAM - deployed and produced for more than 100 ships for the navies of:**

- ❖ Germany
- ❖ United States of America
- ❖ Korea
- ❖ Greece
- ❖ Egypt
- ❖ United Arab Emirates
- ❖ Turkey



# RAM – Management Architecture & Cooperation



The RAM Cooperation is based on Memoranda of Understanding between the Governments of the United States of America and the Federal Republic of Germany and industrial Cooperative Program Agreement (CPA) between Raytheon and RAMSYS.

# SeaRAM

**DIEHL**  
Defence



US NAVY –  
USS Independence  
(class LCS 2)

**SeaRAM** is an autonomous weapon system with own sensor suite and combat management system providing a highly effective Ship Self Defence. It perfectly combines the superior capabilities of the RAM Missile with the proven Phalanx technique.

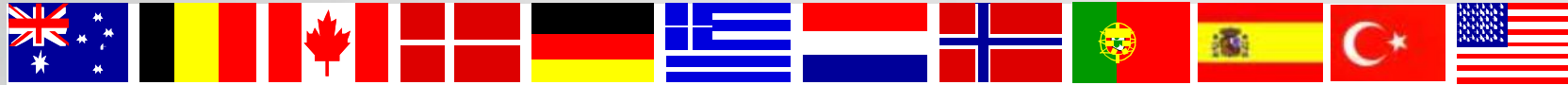
**SeaRAM** started as an industrial initiative, founded by Raytheon and RAMSYS in 1998. As of today SeaRAM is continued as a US Navy Program.

The first **SeaRAM** system has been successfully integrated and tested on the LCS USS Independence Prototype class in 2010.



# Evolved SeaSparrow Missile - ESSM

**DIEHL**  
Defence



**ESSM** is a cooperative program among twelve nations.

The **ESSM** weapon system provides medium range air defense capability.

Several launch systems including vertical launch capability are available.

During flight the missile receives uplink information from the ship's CMS to support semi-active terminal homing.

- ❖ More than 2600 Missiles delivered
- ❖ Third Party Sales to Japan and United Arab Emirates
- ❖ RAMSYS workshare approx. 10%



**Thank you for your attention!**