Ministry of National Defence - Cooperation with the Romanian Defence Industry

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CONTENT

The Integrated Defense Acquisition Management System in the MoND
Major cooperation programmes involving Romanian Defence Industry
Priority R&D Projects
Strategic Programmes
Industry Involvement in the Capability Development Process
Guiding principles of acquisition programmes
Defence acquisitions priorities of the MoND.
ARMAMENTS DEPARTMENT RESPONSIBILITIES

**PROVIDES**
- Management of programmes and contracts for acquisition of armament systems
- Management of research & development activities
- Quality assurance at military equipment providers
- Control of special products import & export operations
- Acquisition policies inside MoND, as regulation authority in this domain
- Technical standardization and metrology activities

**SUPERVISES**

**COORDINATES**
- Management of MoND relations with National Defence Industry
- Management of international technical cooperation in the Armaments Domain

Unclassified
DEFENCE PLANNING COUNCIL

PLANNING, PROGRAMMING AND BUDGETING SYSTEM

GENERAL STAFF, FORCES AND SERVICES

MISSION NEEDS AND OPERATIONAL REQUIREMENTS ESTABLISHING SYSTEM

ACQUISITION MANAGEMENT SYSTEM

ARMAMENTS DEPARTMENT

ACQUISITION COUNCIL

Unclassified
### PHASES
- **Preliminary activities of Phase 0**
- **Phase 0**
  - Concept Study
- **Phase 1**
  - System Definition
- **Phase 2**
  - Technological Development
- **Phase 3**
  - Production and Deployment
- **Phase 4**
  - Operation and Support
- **Phase 5**
  - Disposal

### DECISION POINTS
- **DP 0**
  - Concept study approval
  - AM
  - MND

- **DP 1**
  - Starting a new programme approval
  - AM
  - ORD

- **DP 2**
  - Development approval
  - AM
  - ORDR

- **DP 3**
  - Production approval
  - AM
  - ORDR

- **DP 4**
  - Modification approval
  - AM
  - MoD&CHODR

- **DP 5**
  - Retirement approval
  - MoD&CHODR
  - CDSCA

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**AM** - Acquisition Memorandum

**AC** - Acquisition Council

**DP** - Decision Point

**CS** - Concept Study

**MND** - Mission Need Document

**ORD** - Operational Requirements Document

**ORDR** - Operational Requirements Document Review

**MoD&CHODR** - Minister of Defence & Chief of Defence Report

**CDSCA** – Country Defense Supreme Council Approval

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**Unclassified**
MAJOR COOPERATION PROGRAMMES

IN INVOLVING THE ROMANIAN DEFENCE INDUSTRY

-IAR - 99 “ȘOIM” -ADVANCED TRAINER /CLOSE SUPPORT AIRCRAFT
-IAR - 330 “PUMA” -HELICOPTER UPGRADED WITH “SOCAT” SYSTEM
-IAR-330 “PUMA NAVAL”- HELICOPTER FOR TYPE 22 FRIGATES
-“TR-85M1” - ROMANIAN UPGRADED TANK
- “MLI - 84M” - INFANTRY FIGHTING VEHICLE
- “PIRANHA III C” - (8 x 8) ARMoured PERSONNEL CARRIER
- “LAROM –ACCS” - MULTIPLE LAUNCHER ROCKET SYSTEM
- “CNMN /RTP” -NATIONAL COMMUNICATIONS MILITARY NETWORK
- “CNMN /RADIO” -MOBILE COMMUNICATIONS MILITARY NETWORK
MAJOR COOPERATION PROGRAMMES

“İAR - 99 ŞOİM” ADVANCED TRAINER /CLOSE AIR SUPPORT

COMPANIES INVOLVED IN THE PROGRAMME:

NATIONAL COMPANIES:
• SC AVIOANE SA Craiova

FOREIGN COMPANIES:
• ELBIT Systems Ltd. - Israel
• LITTON – Italy
• TRIMBLE – USA
• ALLIED SIGNAL – USA
• MASON – USA

OBJECTIVES:
- to provide an advanced jet trainer, ammunitions and a flight simulator;
- integration of modern avionics and weapons management system;
- to accomplish the following missions:
  ✓ training for MIG-21 LANCER pilots;
  ✓ training for military pilots in preparation for 4-th generation multirole aircraft;
  ✓ close air support with high precision.
OBJECTIVES:
- to provide a multifunctional helicopter, able to perform complex missions, including combat missions in support of troops, in modern battlefield;
- to assure various missions in theatres of operations (SAR, tactical transportation and MEDEVAC).
IAR-330 “PUMA NAVAL” HELICOPTER FOR TYPE 22

COMPANIES INVOLVED:
NATIONAL COMPANIES:
SC IAR Braşov SA

FOREIGN COMPANIES:
Honeywell - USA
BAe Systems – UK
TERMA - Denmark
Rafael - Israel
IMI - Israel
ELISRA - Israel
ELBIT Systems Ltd – Israel

OBJECTIVES:
- Naval helicopters on the type “22” frigates provide increased support in international missions, as follows:
  - increase ASW capability;
  - increase SAR capability;
  - support of combat missions against illegal sea traffic.
“TR-85M1” ROMANIAN UPGRADED TANK

OBJECTIVES:
• to provide a modernized TR-85M1 battalion to Land Forces;
• to assure interoperability with NATO systems;
• to modernize Romanian tanks and improve their performance;
• to assure logistic support in national defence industry;
• to increase fire power and improve turret stabilization system;
• to improve mobility, protection, communication systems and night operation capabilities.

COMPANIES INVOLVED IN THE PROGRAMME:

NATIONAL COMPANIES:
- UMB-MECHANICAL PLANT BUCHAREST;

FOREIGN COMPANIES:
- EADS SYSTEMS & DEFENCE ELECTRONICS;
- SAGEM;
- RKS;
- SFIM/ODS;
- KOLLMORGEN;
- THALES;
- L’HOTELLIER
COMPANIES INVOLVED IN THE PROGRAMME:

NATIONAL COMPANIES:
• SC MFA SA MIZIL

FOREIGN COMPANIES:
• OERLIKON CONTRAVES - Switzerland
• CATERPILLAR PERKINS - U.K.
• HARRIS - USA
• L’HOTELLIER - France
• RAFAEL - Israel
• SFIM/ODS - France

OBJECTIVES:
- to assure the interoperability with NATO systems;
- increase of fire power;
- improvement of mobility, implementation of new C2 systems and night operation capabilities;
- to increase protection by laser illumination warning system, smoke grenades launcher, and quick-action fire extinguishing system with non-toxic agent;
- to transfer know-how to national industry;
- to assure integrated logistic support.
OBJECTIVES:
- to assure interoperability with NATO systems;
- to improve the transport capability of Land Forces units;
- to increase the performances, mobility, flexibility and force protection in the theatres of operation missions and on the national territory.

COMPANIES INVOLVED IN THE PROGRAMME:

MAIN CONTRACTOR:
- MOWAG – Switzerland

SUBCONTRACTORS:
- MFA MIZIL SA
- PRO OPTICA SA
- ELBIT- ISRAEL

“PIRANHA III C” 8 X 8 ARMoured PERSONNEL CARRIER
“LAROM” MULTIPLE LAUNCHER ROCKET SYSTEM

COMPANIES INVOLVED IN THE PROGRAMME:

NATIONAL COMPANIES:
• SC AEROSTAR SA Bacau

FOREIGN COMPANIES:
• IMI - Israel
• ELBIT - Israel
• VAISALA OYJ - Finland

OBJECTIVES:
- to assure the interoperability with NATO systems;
- to provide 2 combat battalions and one training battalion with long range rocket artillery;
- to extend fire range until 45 km;
- to implement a automated fire control system - ACCS;
- to achieve increase performance parameters.
OBJECTIVES:
- to implement a NATO compatible strategic communications system.
- to assure continuous, flexible, secure connections between military units in the country and deployed in Theatres of Operation.

COMPANIES INVOLVED IN THE PROGRAMME:

NATIONAL COMPANIES:
• S.C.ELLETRA Communications;
• SC MARCTEL SIT COM S.R.L;
• METRA (MoND)
• SC AMTEL Compozite – Brasov

FOREIGN COMPANIES:
• SELEX ELSAG - Italy
COMPANIES INVOLVED IN THE PROGRAMME:

NATIONAL COMPANIES:
- SC IEMI SA Bucharest
- SC ELPROFSA Bucharest
- SC INTERACTIVE SBA SA Bucharest

FOREIGN COMPANIES:
- THALES DEFENCE - UK
- HARRIS – USA
- MOTOROLA – USA
- SELEX Communications SpA - Italy
- KONSBERG Defense Communications –

OBJECTIVES:
- to assure interoperability with NATO systems;
- to provide Romanian forces with hopping frequency radio stations, able to transmit secure data, voice and video images protected against interference;
- to improve the command and control process efficiency.
PRIORITY R&D PROJECTS
"TBT 8 x 8" ARMOURED PERSONNEL CARRIER (APC)

Contract signed between Military Equipment & Technology Research Agency (METRA) and National Company ROMARM

MAIN OBJECTIVES:
- Higher mobility;
- Ballistic & mine protection: levels 3, 3a & 3b;
- Higher fire power.

STEPS:
- Ballistic & mine protection testing (STANAG 4569)
- Driveline integration on the armoured hull and testing;
- Finalizing prototype and test & validation with MoND;

Romanian companies participating in the project:
- C.N. ROMARM S.A.-Uzina Automecanica Moreni (system integrator)
- STIMPEX (ballistic and mine protection systems)
- INTERACTIVE (communication system)
- UTI (armament system)
- IOR (optoelectronic systems)
Cooperation agreements have been signed with factories belonging to the National Company C.N. ROMARM S.A.: “SC Weapons Factory Cugir S.A.” and “SC Mechanical Factory Sadu S.A.” to realize the projects associated to the assault weapon and the 5,56 x 45 mm ammunition.

- 2011: The 5,56mm normal bullet, training and tracer ammunitions have been tested and validated with MoND;
- 2012: Testing by METRA of 3 experimental models of the weapon.
STRATEGIC PROGRAMMES

LAND FORCES:
- ARMoured PERSONnel CARRIERS
- LIGHT VEHICLES (ARMoured AND UNARMoured)

AIR FORCES:
- MULTIROLE AIRCRAFT
- LONG RANGE AIR DEFENCE CAPABILITY

NAVAL FORCES:
- MULTIFUNCTIONAL CORVETTES
- MINE HUNTERS
Industry Involvement in the Capability Development Process

Capability Development Process

- Analysis of Strategic Environment
- Identify Capability Need
- Derive Requirement
- Conduct Gap Analysis
- Identify Possible Solutions
- Conduct Implementation

“Involvement Triangles”

- GS and AFC
- DpA

Industry Contribution

- Strategic Advice
- Technology Trends
- Market trends
- Feasibility demonstration

Development ....Production

Unclassified
The systems must be compatible and interoperable with those operated by NATO and EU member countries;

Compliance with EU Directives regarding defence acquisitions;

Promoting international cooperation, both at regional level and at the level of European Union and NATO;

Acquisition contracts must have clauses to provide whole life cycle maintenance, based on the operational profile defined by the user forces;

Involvement, at the largest possible extent, of national defence industry and achievement of technology transfer, in order to have factory-level maintenance provided in Romania.
MoND DEFENCE ACQUISITION PRIORITIES

- Multirole Combat Aircraft programme successful achievement;
- Implementation of two NATO command structures in Romania:
  - NATO Forces Integration Unit (NFIU);
  - Multi-National Division South East Headquarters (MND SE HQ);
- Type 22R frigates modernization;
- Transport vehicles – both armoured and un-armoured types;
- Implementing the Concept for C4ISR systems development, with priority for Command Posts at the levels of: Division, Brigade, and Battalion;

Achievement of these priorities depends on the financial resources which will be allocated.