

Colonel(eng.) Vilho Kangaskoski

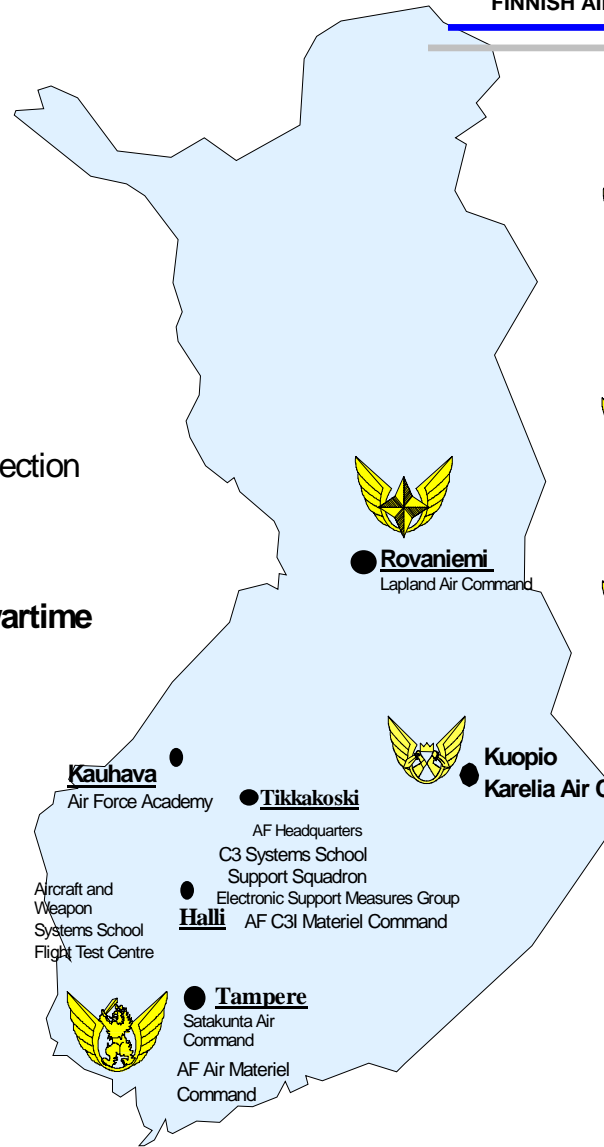
- M.Sc (EE), in University of Oulu 1973
- 1972 - 1975, in industry and as teacher
- 1975 - 1982 in Electronic Support Measures Group as chief of office
- 1982- 1990 in FAF HQ as chief of office and chief engineer
- 1990 - 1992 in Airforce Depot as technical director
- 1992 - Commanding Officer of C3I Materiel Command

Content

- FAFC3I
- The improvement of war materiel
- ILS
- The maintenance view of LCM
- LCC
- Availability performance programme
- Planning of maintenance

Content

- Integration to existing maintenance system
- Maintenance control
- Planning of rejection
- Summary



Finnish Air Force Headquarters

Command Headquarters of the Finnish Air Force



Air Commands

Airspace surveillance and protection
 - surveillance radars
 - interceptors



Training for peacetime and wartime duties of

- regular personnel
 - conscripts
 - reservists



Support Squadron

- reconnaissance flights
 - support flights



C3 Systems School

- training of command, control, and communications personnel



Air Force Academy

- pilot training
 - officer career training



Aircraft and Weapon Systems School

- training of aircraft maintenance personnel



Electronics Support Measures Group

- signal and electronic measurement and research



AF Air Materiel Command

- maintenance of aircraft materiel
 - quality control



AF C3I Materiel Command

- installations and maintenance of command, control, and communications systems
 - environmental testing



Rovaniemi
 Lapland Air Command



Kuopio
 Karelia Air Command

Kauhava

Air Force Academy

Tikkakoski

AF Headquarters
 C3 Systems School
 Support Squadron
 Electronic Support Measures Group

Halli

AF C3I Materiel Command

Aircraft and Weapon Systems School
 Flight Test Centre

Tampere

Satakunta Air Command
 AF Air Materiel Command



FINNISH AIR FORCE C3I MATERIEL COMMAND



**THE MAIN PEACETIME MISSION
OF FAF C3I MC
IS TO INSTALL AND MAINTAIN THE
GROUNDBASED ELECTRONIC
SYSTEMS USED BY FINNISH AIR FORCE**





- SURVEILLANCE RADAR NETWORKS**
- COMMUNICATION NETWORKS**
- COMPUTER NETWORKS**
- AIR TRAFFIC CONTROL SYSTEMS**
- EW-SYSTEMS**
- AC/DC POWER SYSTEMS**





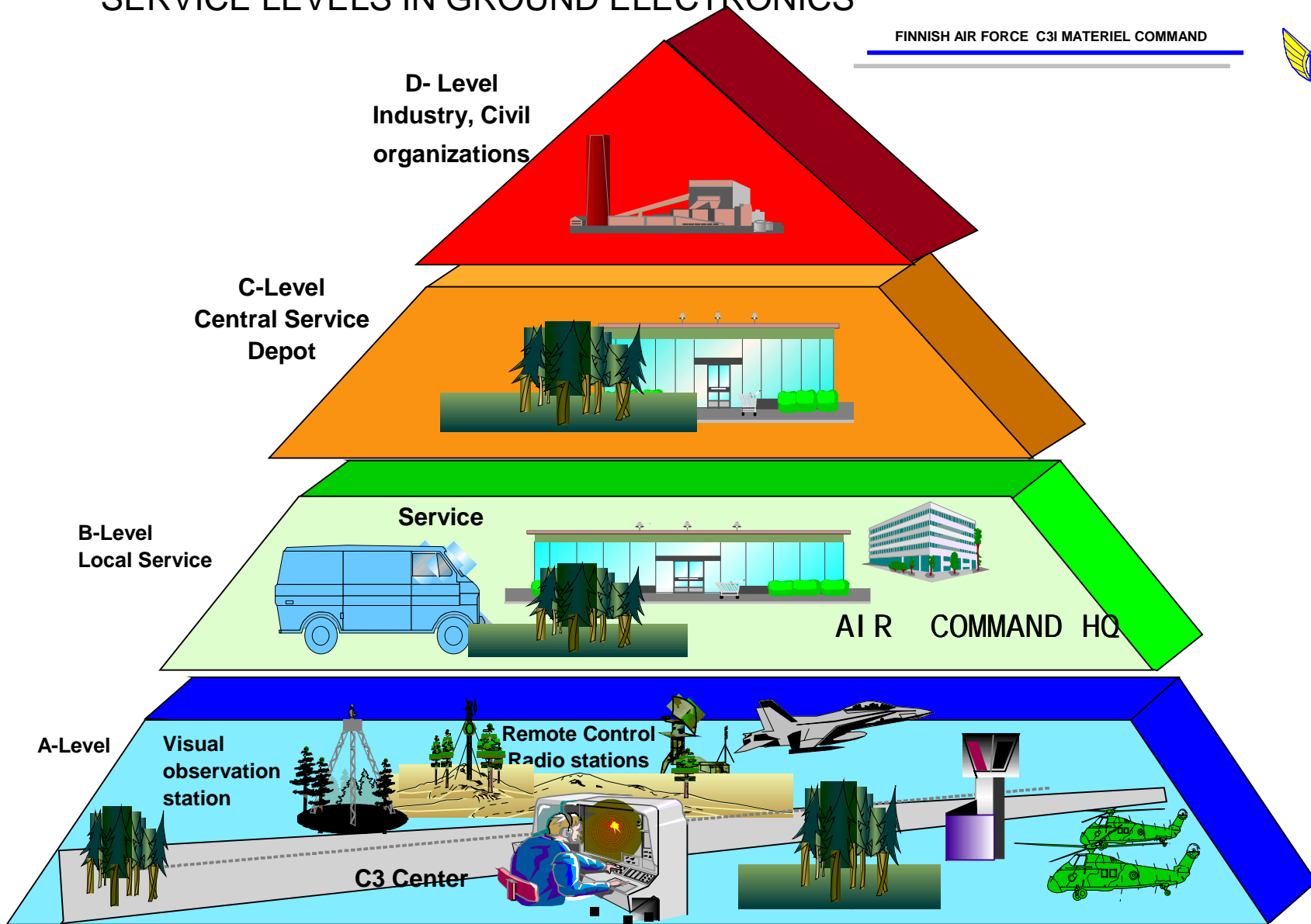
Main processes of C3I Materiel Command:

Coordination of life-cycle
maintenance

Planning and control
of maintenance,
installations,
inspection, and giving
the system to
operational user

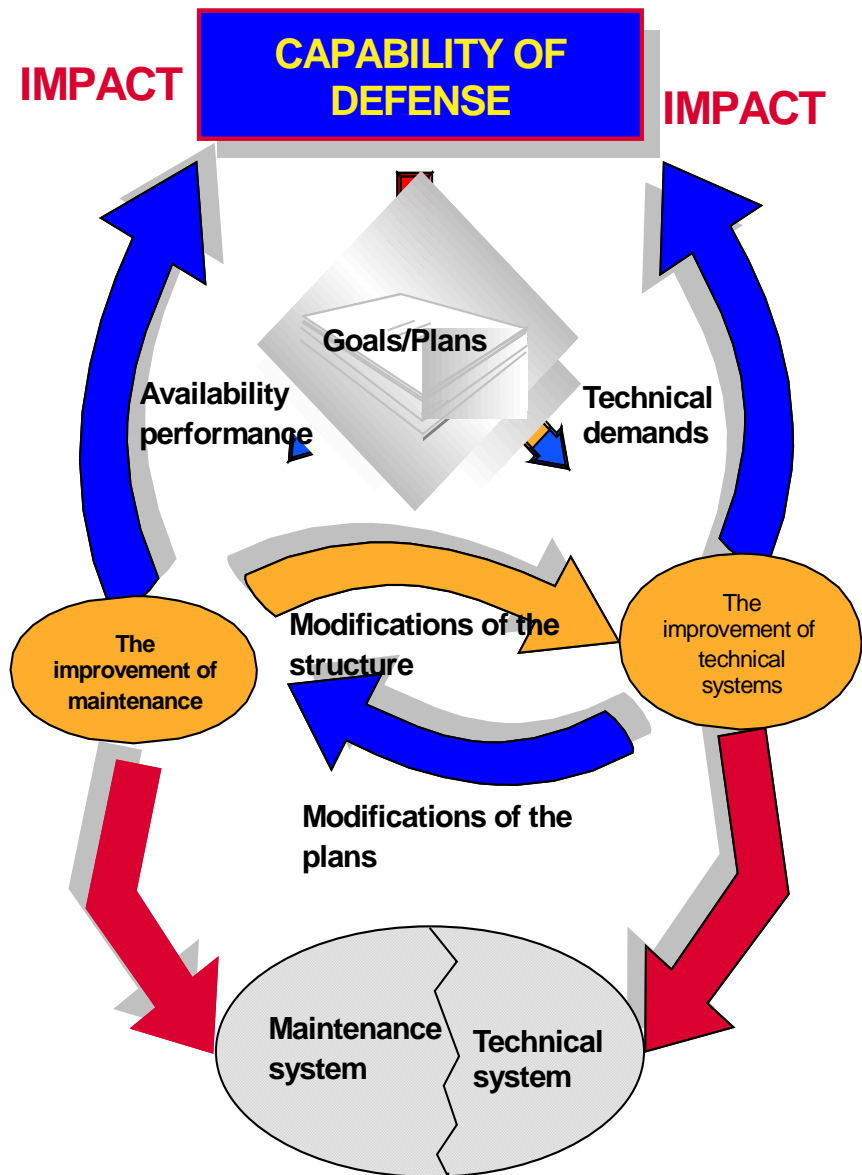
Material
services.

SERVICE LEVELS IN GROUND ELECTRONICS





THE IMPROVEMENT OF WAR MATERIEL

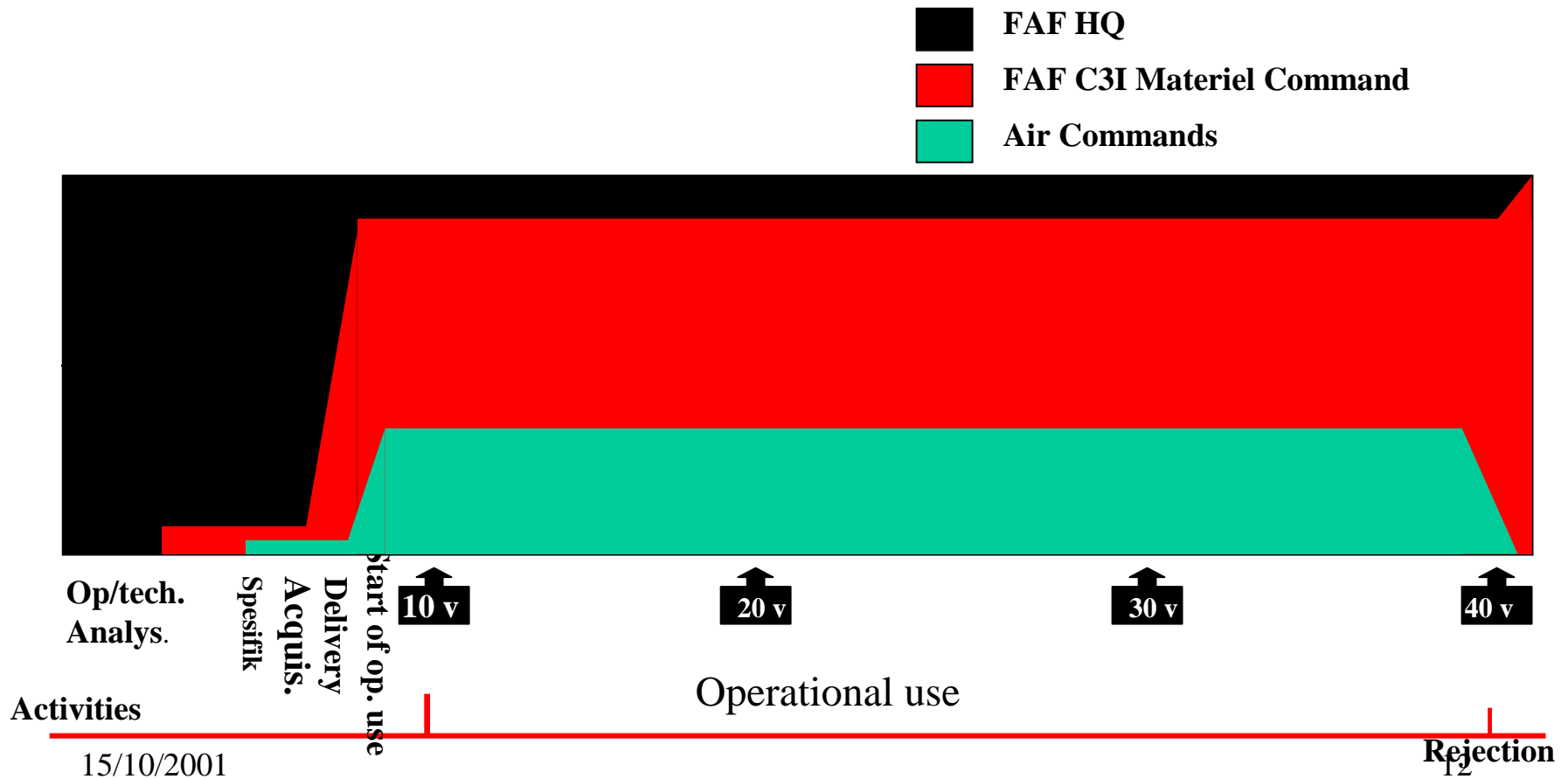


ILS/FAF

- From first drawing until rejection
- Design/purchase of new system
- Purchase of existing product

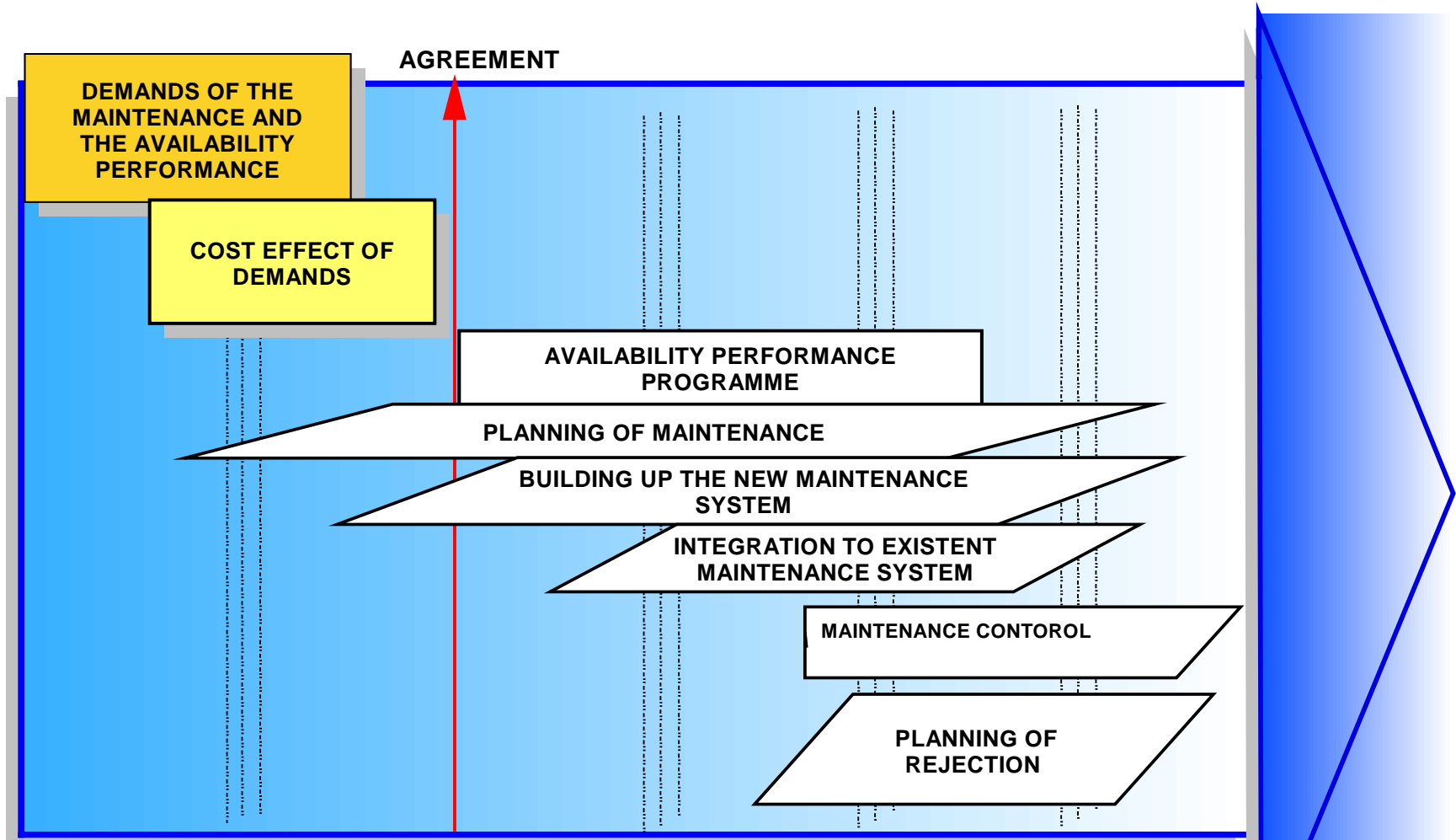


Tasks in LCM in FAF

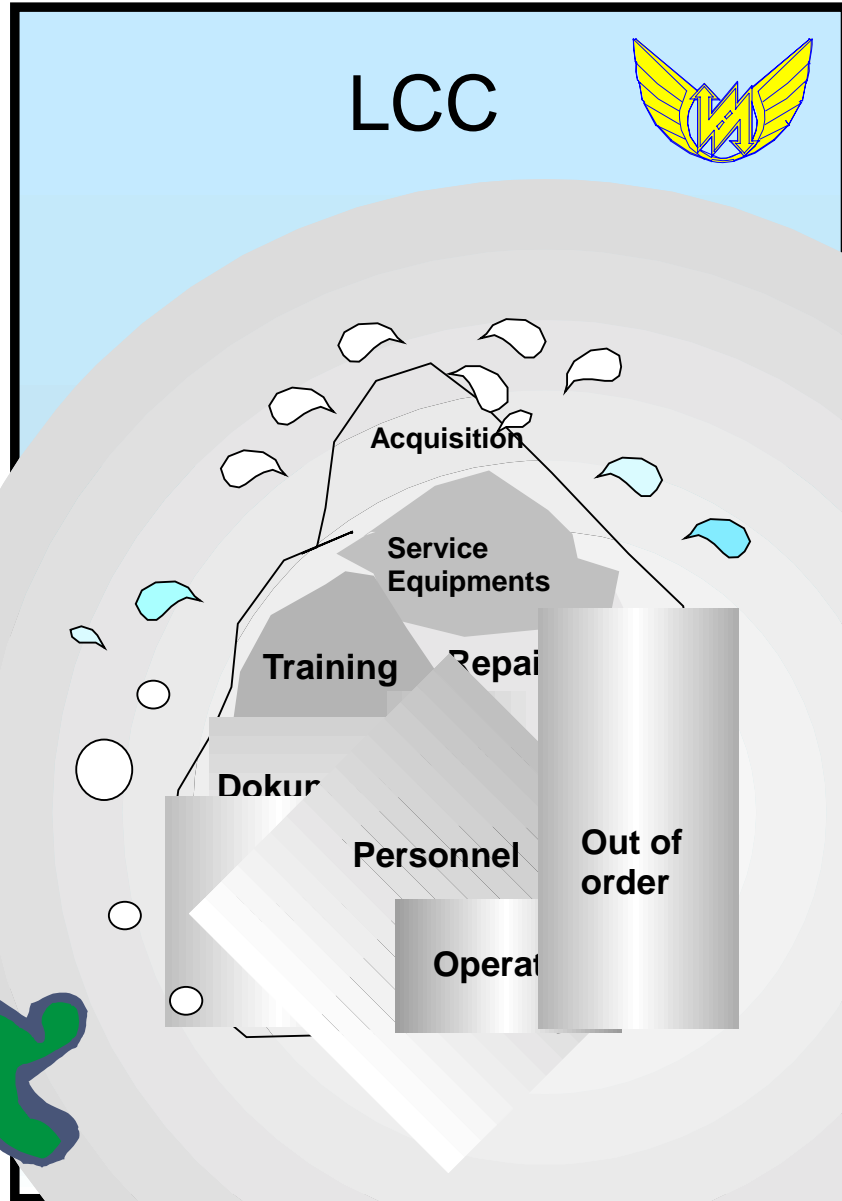
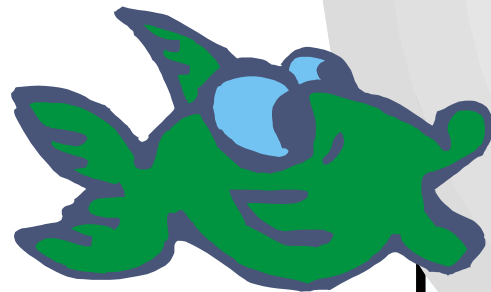




THE MAINTENANCE VIEW OF LIFE CYCLE MANAGEMENT (LCM)



LCC



Availability performance programme

- Operational requirements
- MTBF, MTTR
- Infrastructure of maintenance organisation
- Logistics delays
- New know-how
- Result:optimising of training requirements, spare parts, tools, personnel, outsourcing

Planning of maintenance

- request of proposals
- evaluation of proposals
- spare parts
- tools
- training
- tasks of maintenance levels

Planning of maintenance

- in house/outsourcing
- licences
- maintenance in wartime
- budgeting

Integration to existing system

- System knowledge
- Interfaces
- Standards
- Know-how

Maintenance control

- SW: requirements for maintenance, maintenance planning, configuration management, failure reporting, repair reporting, material handling, item tracking
- spare parts optimising
- financial planning
- purchase of material
- control of subcontractors

Planning of rejection

- Listing of polluting material
- reusable material

Summary

- Start LCM early
- good knowledge of operational use
- good knowledge of the technical system
- same understanding of terms and standards