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## **ANSA Phase III**

# **C2: DIMMA example sign-off (TC 28/2/95)**

**Guangxing Li**

### **Abstract**

Request for approval of two documents:

APM.1222: Some Engineering Aspects of Real-Time

APM.1207: Real-Time ANSAware Version 1.0: Programming and System Overview

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APM.1425.01

**Approved**

24th February 1995

Project Management (confidential to ANSA consortium for 2 years)

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**Distribution:**

**Supersedes:**

**Superseded by:**





## **C2: DIMMA example sign-off**

**Guangxing Li**

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## Introduction

- really P3 (old workplan) sign-off
- real-time ANSAware design and implementation
  - document APM.1222: Some Engineering Aspects of Real-Time
  - document APM.1207: Real Time ANSAware Version 1.0: Programming and Systems Overview



## Document APM.1222

- design of a real-time engineering model
- real-time engineering features: predictability, programming control, timeliness, mission orientation, performance
- what needs to be addressed to have real-time objects - object execution model
- real-time tasking model
  - priority based computing: priority inversion, scheduling etc.
  - deadline based computing: meaning of deadline etc.
- real-time communication model
  - controlled multiplex - parallel communication stack
  - timed RPC protocol



## Document APM.1207

- ANSAware/RT based on ANSAware 4.1
- how to do real-time scheduling
- how to do multiplex control - here comes the explicit binding idea
- a new RPC protocol - TREX
- extended PREPC, IDL
- first done on Alpha OSF/1
- ported to HP/RT (helped by BNR) and LynxOS (helped by GPT)



## Comments

- **CNET - APM.1222, lots of comments, most received, and changed title**
  - **QoS needs more treatment (APM.1151, still a draft)**
- **HP - Leon Bouwmeester, lots of minor comments, most received**
- **GPT - APM.1207, all received**

**Your approval or ...**