



TRANSFER OF RESULTS OF THE AICIME / AICIME II / AITIME PROJECTS
FOR VOCATIONAL ADVANCEMENT TRAINING
OF ENGINEERS IN MECHANICAL INDUSTRY

[PL/99/1/086628/PI/III.3.a/FPC/1]

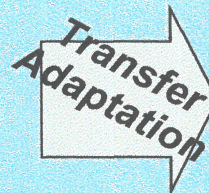
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- **Adaptation of materials developed as a result of the European projects AICIME / AICIMEII / AITIME** to the needs of new beneficiaries - new regions and new sectors.
- **Dissemination and Transfer of results of the projects as training materials** for vocational training systems of selected industrial companies.
- **Utilization of new information technologies** in the transfer of the materials and expertise.
- **Creation of a network of European education/training/consulting centres** for exchange of ideas and joining efforts in the area of modern technologies and their introduction into industrial enterprises.



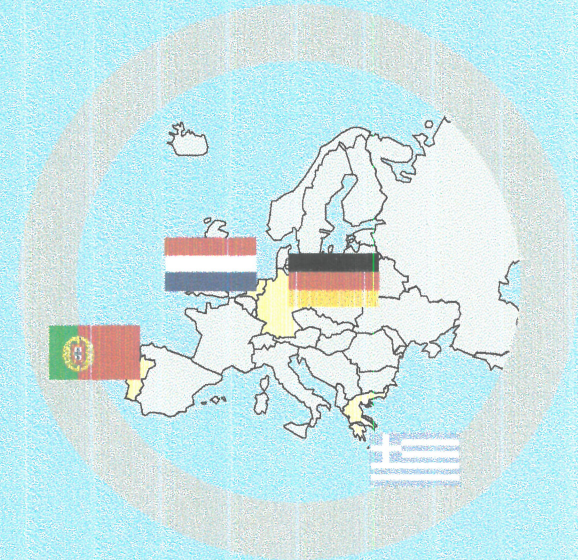
- Automotive
- Food
- Wood

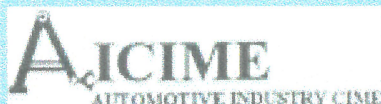


- Toolmaker
- Railway vehicles



- **AICIME:**
Automotive Industriy Computer Aided Manufacturing and Engineering
- **Objective:**
Transfer advanced technologies to peripheral regions of the European Union.
- **Phase 1:**
 - Analysis of the deficites
 - Analysis of IT solutions suitable for the pilot companies
 - Design of the AICIME architecture and strategy
- **Phase 2:**
 - Design of solutions
 - Application in Portuguese SMEs
 - Transfer of the successful results to GREECE (AITIME)





⇒ **Demonstrator Companies:**

-  **ARJAL**, Vendas Novas/Portugal
cutting, welding, turning, assembly, etc. of metal parts
-  **AUTOSIL**, Cascais/Portugal
production of accumulators
-  **INAPAL**, Oporto/Portugal
cutting, moulding, machining, assembly of plastic parts
-  **SONAFI**, Oporto/Portugal
injection moulding and machining of aluminium and zinc metals

⇒ **Demonstrator Companies:**

-  **SHELMAN**, .../Greece
wood products manufacturer
-  **ACHAIA CLAUSS**, .../Greece
winery
-  **KRONOS**, .../Greece
canned fruit producer

Advisory Board:

-  Alfamicro, Cascais/Portugal;  IAP, Braunschweig/Germany;  IME/Intervisie, Leiden/Netherlands

Further Partners:

-  **PLANET**, Athens/Greece;  **Intrasoft**, Athens/Portugal;
-  [+sub-contractors for specific tasks]



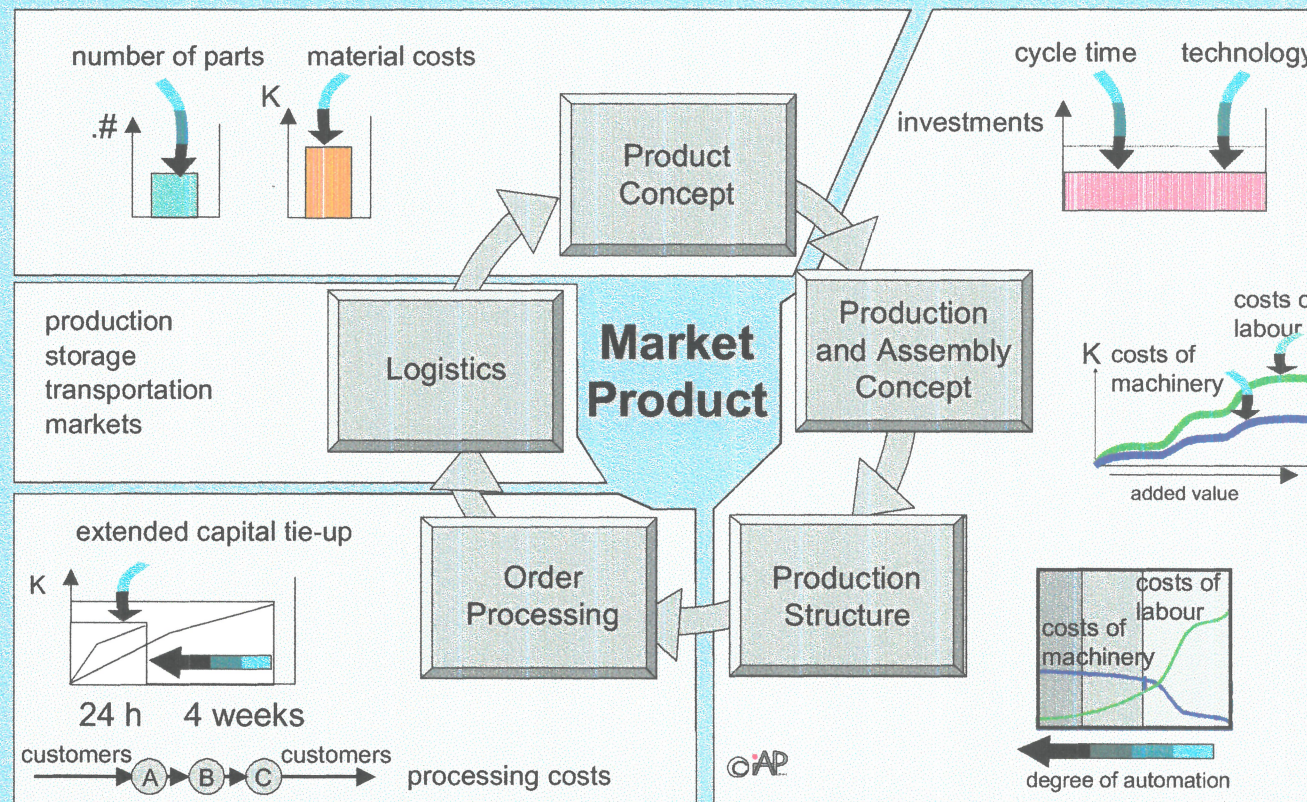
Nat. Techn. Univ. of Athens/Greece; University of Patras, Patras/Greece





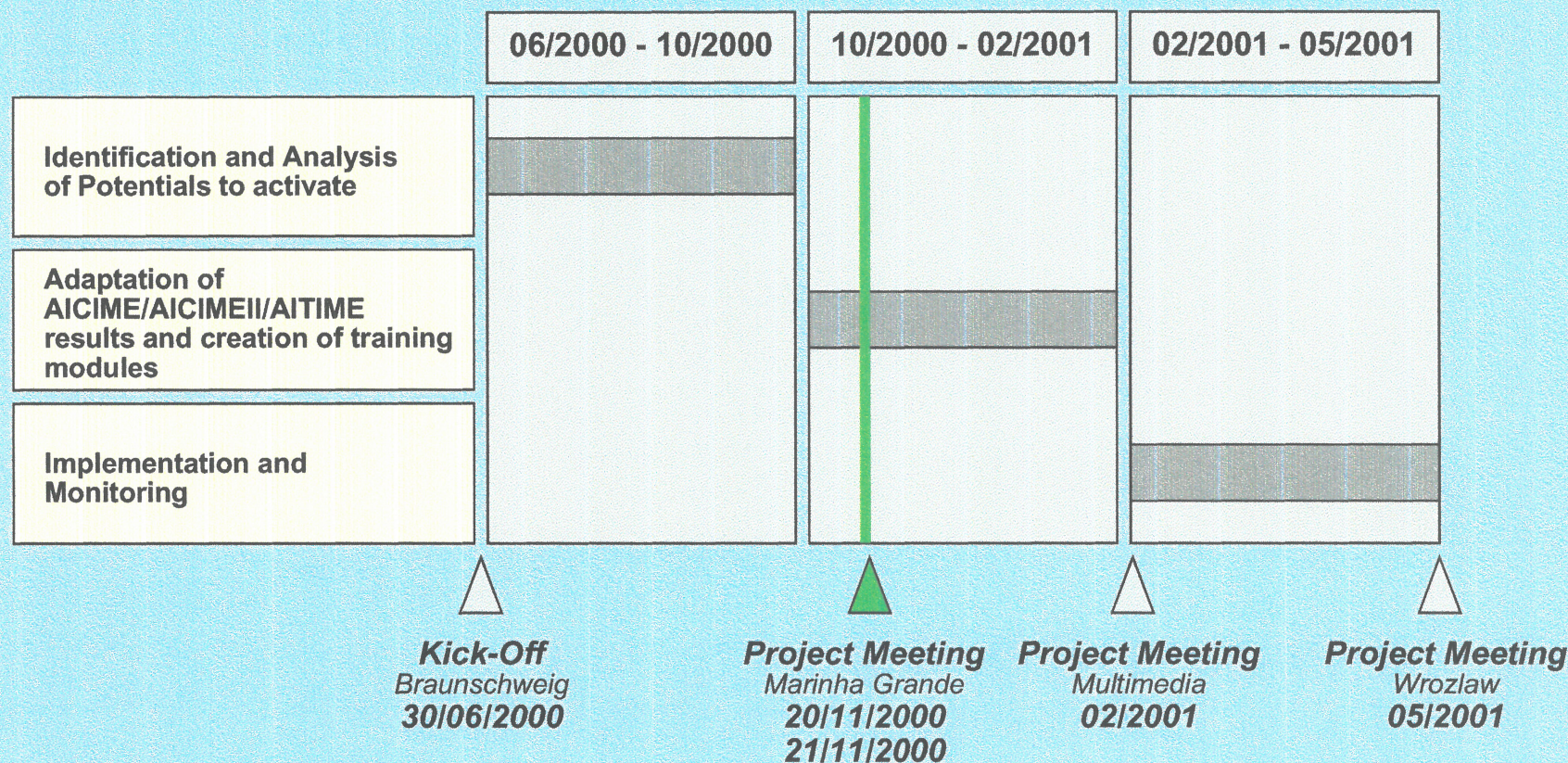
Benefit to be exploited in TRAAAP:

- Methodology
- Tools
- Knowledge



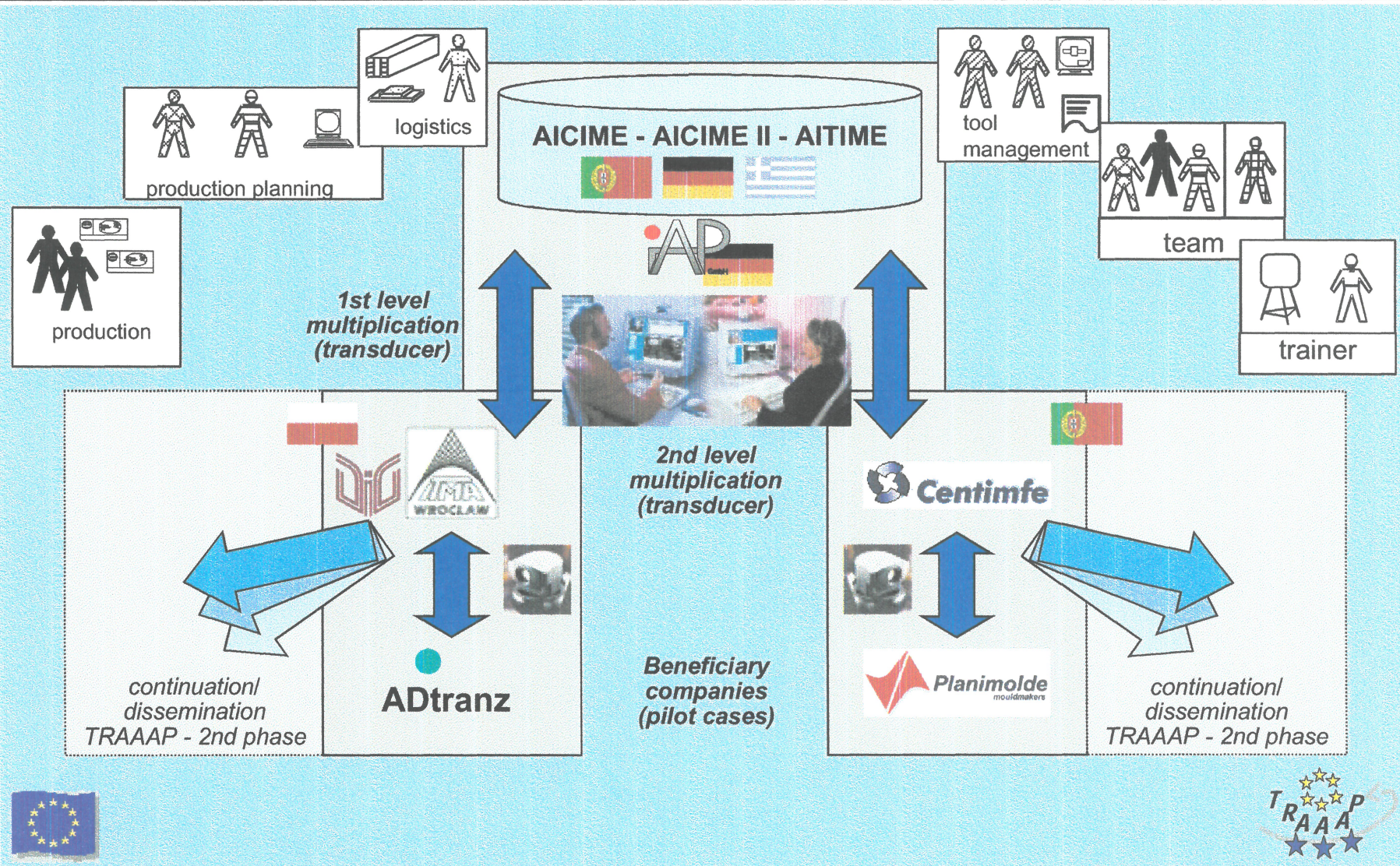
Country	Partner		Field of Activity	Role in TRAAAP
 GERMANY	Institut für Angewandte Produktionstechnologie (IAP) GmbH <i>Braunschweig/Germany</i>		Research and Development/ Consulting	Project Coordinator/ Transducer
 POLAND	Institute of Production Technology and Automation of the Wroclaw University of Technology <i>Wroclaw/Poland</i>		Research and Development/ Consulting	Project Promoter/ Transfer Agent (Transformer)
 POLAND	Bogie Division of ADtranz Pafawag Sp. z o.o. <i>Wroclaw/Poland</i>		Manufacturer of Railway Vehicles	Pilot/ Beneficiary Company
 PORTUGAL	Centro Tecnológico da Indústria de Moldes e Ferramentas Especiais <i>Marinha Grande/Portugal</i>		Research and Development/ Consulting	Transfer Agent (Transformer)
 PORTUGAL	Centro de Planeamento e Fabrico de Moldes, Lda. <i>Marinha Grande/Portugal</i>		Manufacturer of Moulds and Tools	Pilot/ Beneficiary Company
 POLAND	Lower Silesian Chamber of Commerce <i>Wroclaw/Poland</i>		Association of regional SMEs	Observer for Potential Beneficiary Companies





TRAAAP

Approach of the project

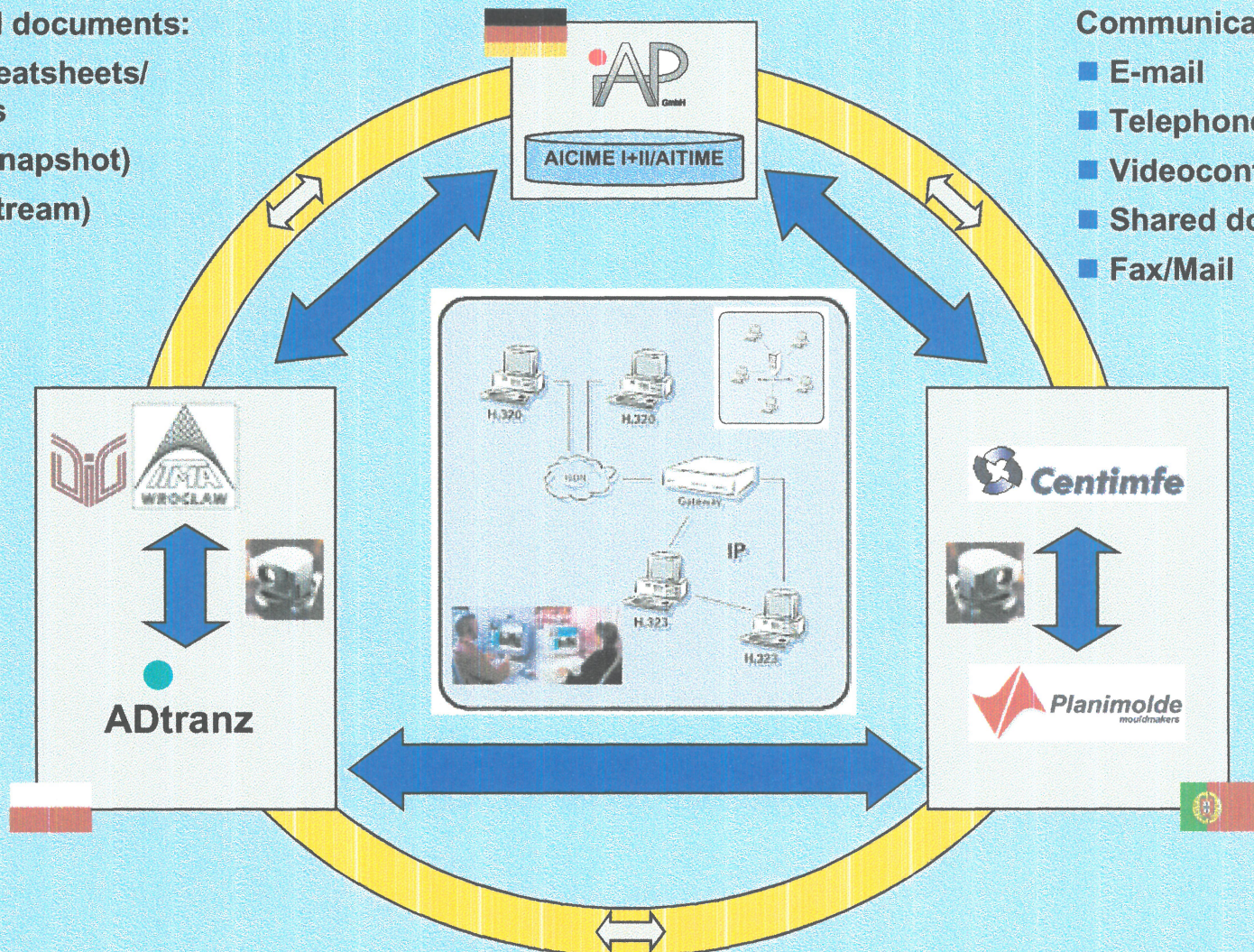


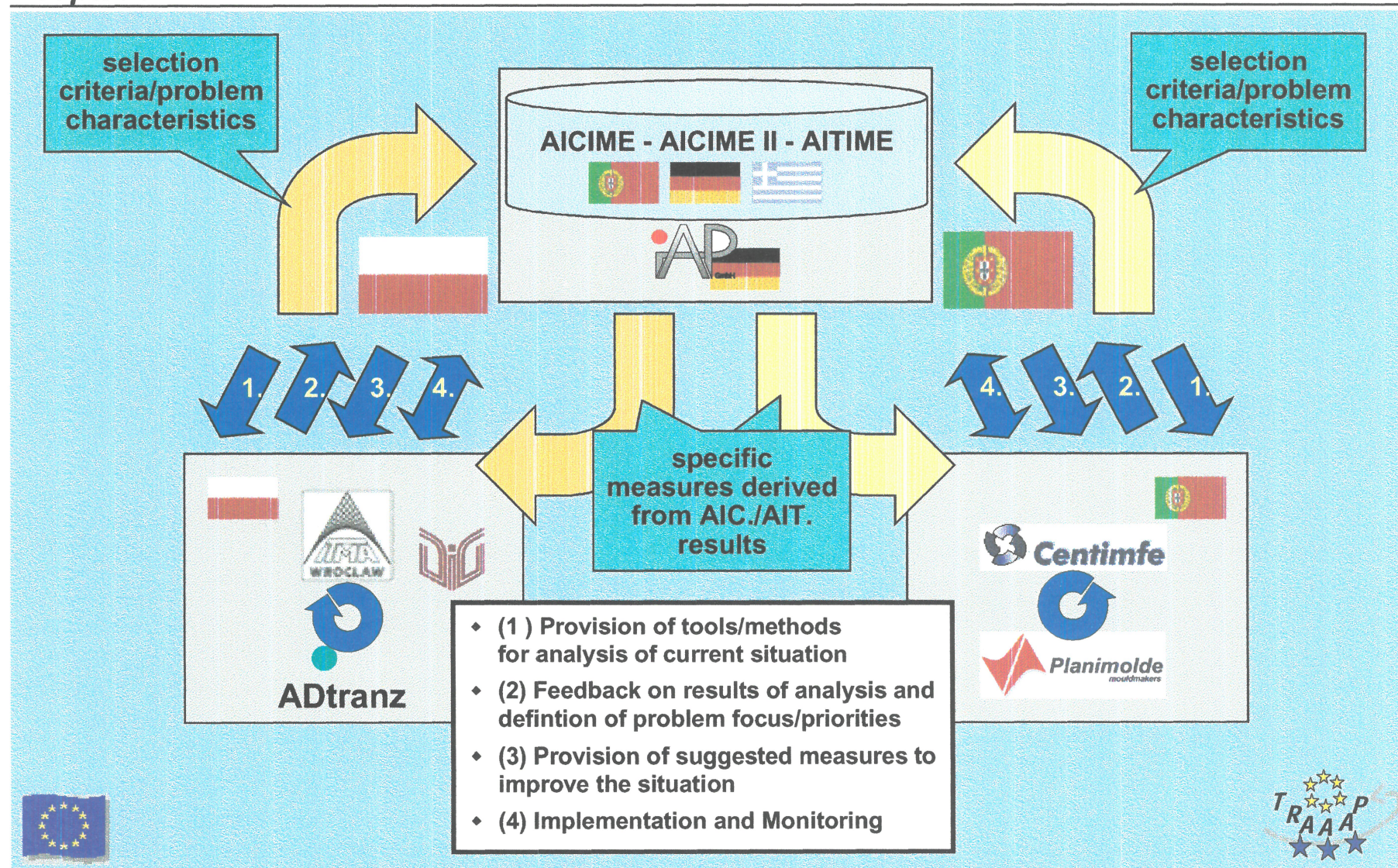
Exchanged documents:

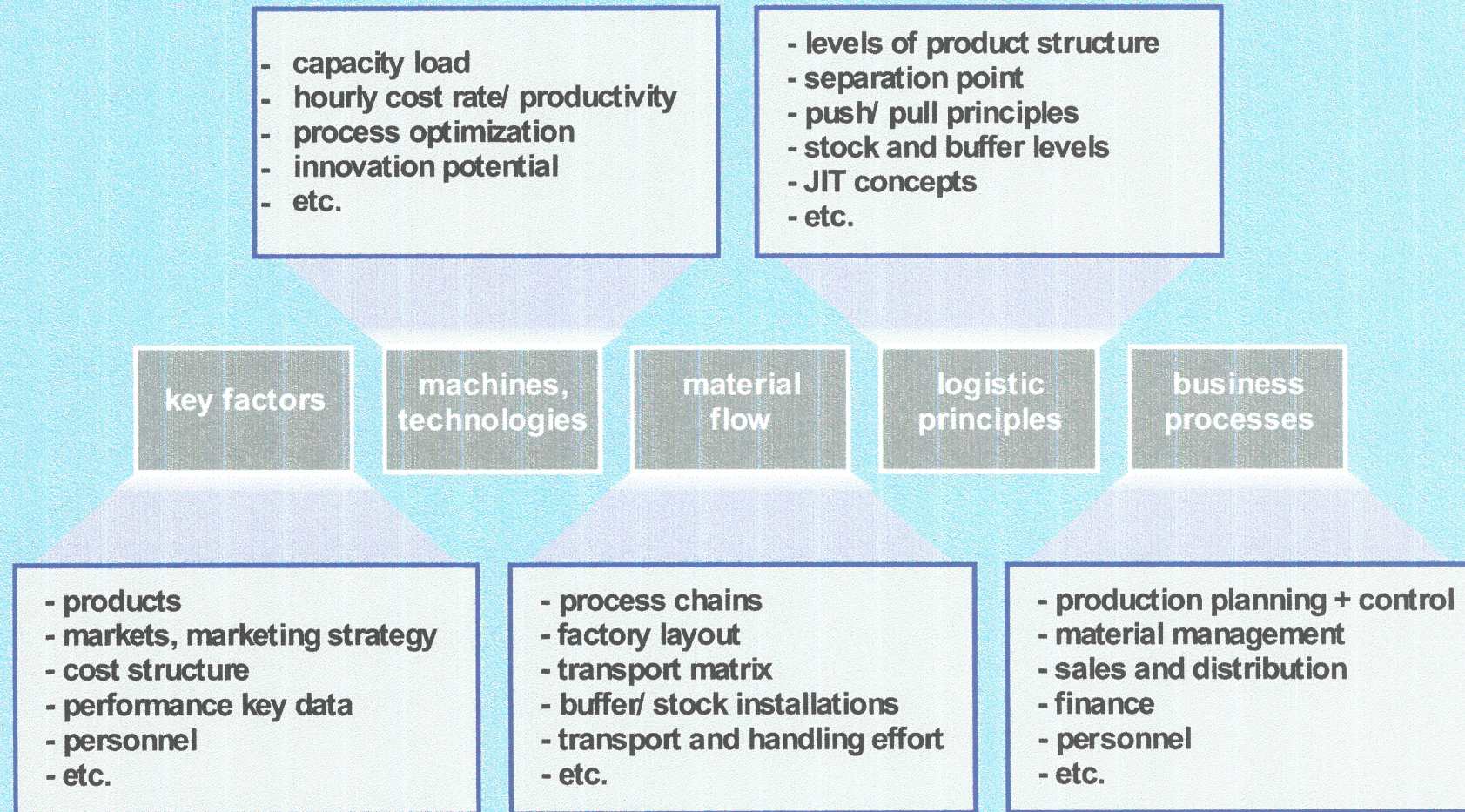
- Text/Spreadsheets/ Sketches
- Photo (Snapshot)
- Video (Stream)
- Audio

Communication means:

- E-mail
- Telephone
- Videoconferencing
- Shared documents
- Fax/Mail







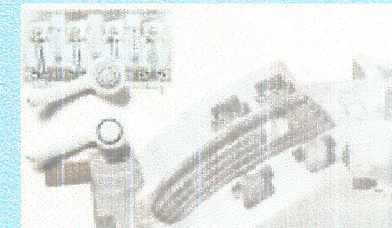
Requirements for Planimolde

- improvement of project planning
- reorganisation of product structures and process structures
- enhancement of information flow
- reduction of time-to-market



Issues to be resolved for optimisation of production

- order processing and management
- lack of codification systems that allows:
 - budgeted facilitation
 - rigorous planning in situations of identical moulds
 - optimisation in realistic control of the situation of the mould
- adaptation of an informatic application that allows:
 - simulation
 - prediction of costs
 - flexibility



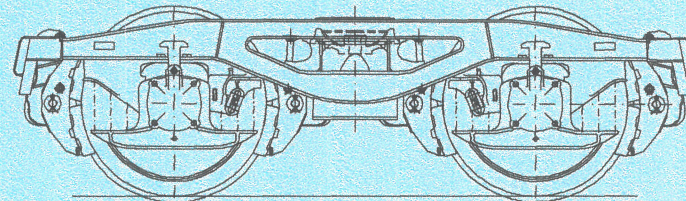
Requirements for the freight bogie division

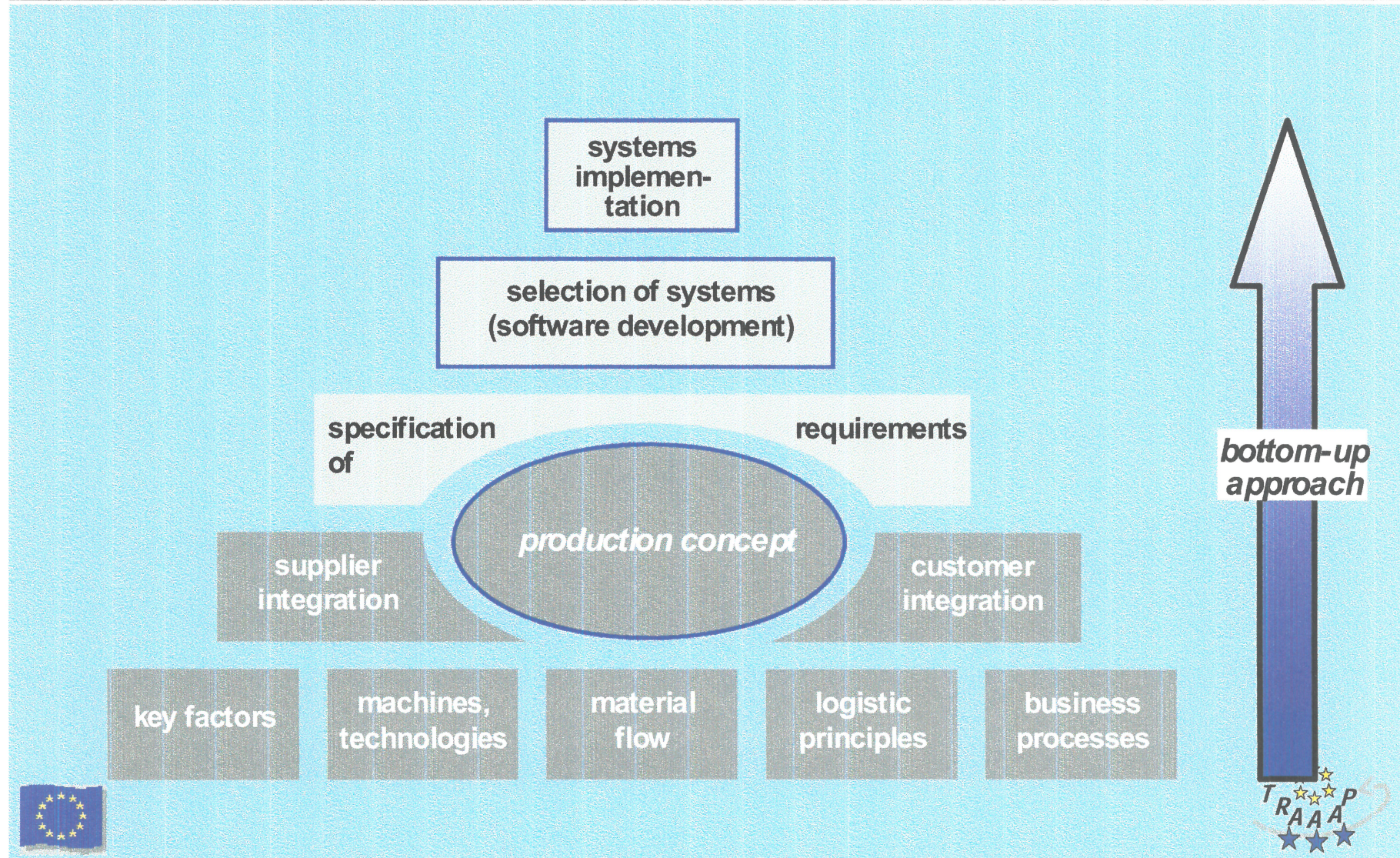
- introduction of project planning
- reorganisation of product structures and process structures
- enhancement of information flow
- reduction of time-to-market

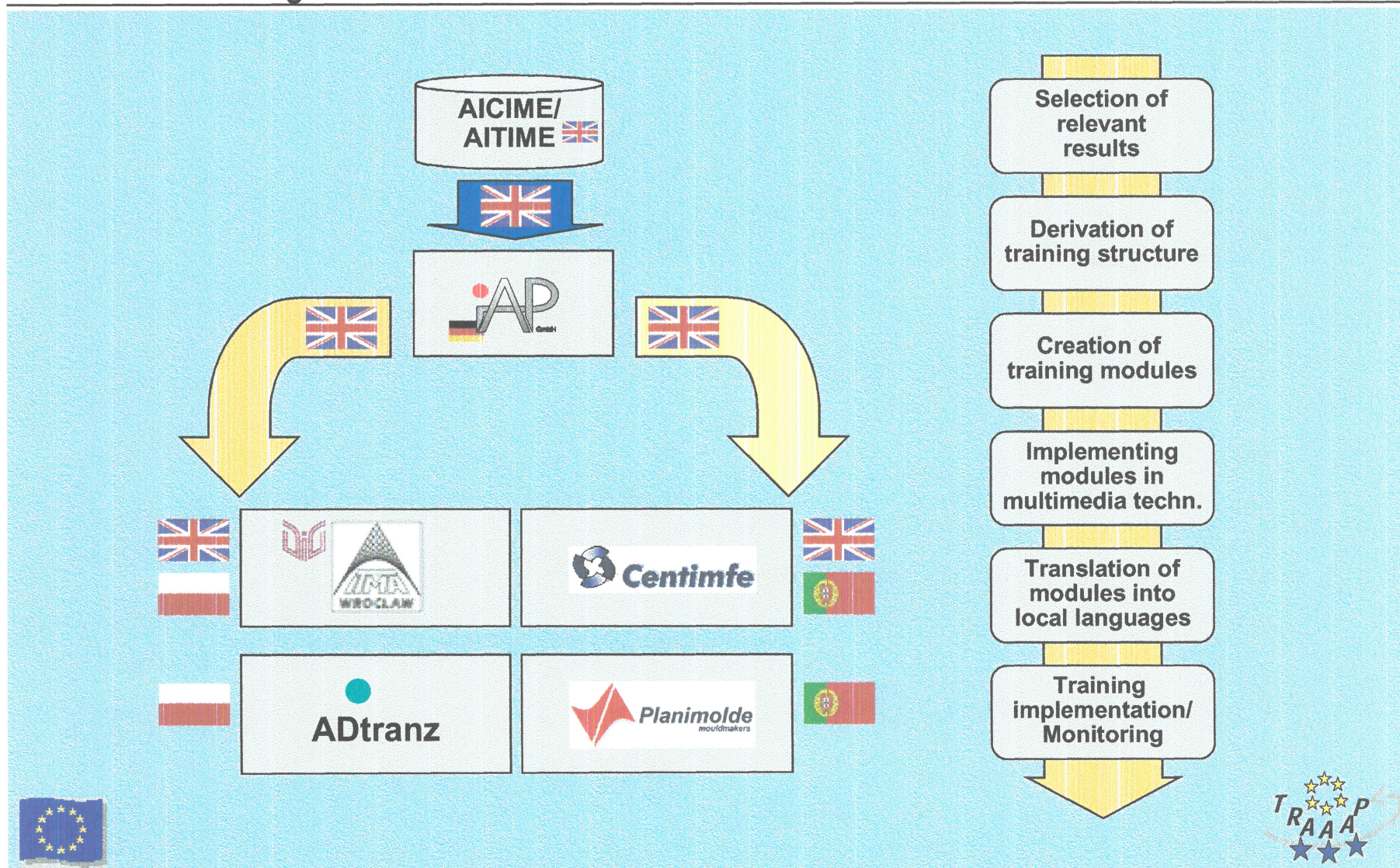


Issues to be resolved for optimisation of production

- order processing and management
- Concurrent Engineering (Simultaneous Engineering) in technical production preparation – databases in design and technology planning
- product structure and product variants in design and technology (CAD, PDM)
- optimisation of production processes:
 - *shortening production (batch) cycle*
 - *„make or buy” analysis*
 - *logistics planning*
 - *stock reduction*
 - *cost reduction*







TRAAAP - Transferência de Resultados dos Projetos AICIME / AICIME II / AITIME para Formação Profissional de Engenheiros na Indústria Mecânica

PERÍODO DE EXECUÇÃO: 2000 a 2001

IDENTIFICAÇÃO DO PROJETO

Este projeto insere-se no Programa Leonardo Da Vinci, e pretende responder às diversas recomendações da Comissão Europeia, no sentido da divulgação, transferência e aplicabilidade de resultados obtidos por projetos já desenvolvidos e financiados no âmbito da União Europeia.

Pretende-se, assim, desenvolver uma rede de cooperação que permita uma interação de saberes, e que possibilite a transferência de know-how, recorrendo às novas tecnologias de informação e comunicação e a aplicações desenvolvidas noutros projetos.

OBJETIVOS

- Transferência de resultados dos projetos AICIME / AICIME II / AITIME
- Desenvolvimento de métodos de especialização com recurso às técnicas desenvolvidas no âmbito desses projetos
- Utilização das novas tecnologias de informação na transferência desses resultados e experiências
- Criação de uma rede europeia de formação na área de tecnologias modernas, com vista à troca de experiências e know how
- Análise dos projetos AICIME / AICIME II / AITIME e preparação dos resultados(IAP)
- Implementação da estrutura de comunicação e ferramentas (IAP / CENTIMFE / IPEA)
- Análise e identificação dos problemas ocorrentes da implementação da estrutura de comunicação(IAP / IPEA / CENTIMFE)
- Adaptação dos resultados dos projetos AICIME / AICIME II / AITIME na solução dos problemas identificados (IAP)
- Criação de módulos de formação (IAP / IPEA / CENTIMFE)
- Implementação dos materiais desenvolvidos em tecnologias de multimedia (IAP / IPEA / CENTIMFE)
- Tradução dos materiais em idiomas locais (IAP / IPEA / CENTIMFE)

Referências:

Centimfe. (2000). Transferência de Resultados dos Projetos AICIME / AICIME II / AITIME para Formação Profissional de Engenheiros na Indústria Mecânica. <https://www2.centimfe.com/index.php/pt/141>