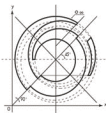




Nov. 2000

POLYTAN Status

ALSTOM Power Technology Centre

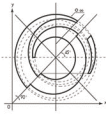


POLYTAN Vision



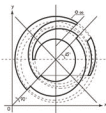
- Single environment for Space Thermal analysis.
- Minimise manual calculation requirements.
- Expanded sub-modelling concept to geometry.
- Simplification of model integration.
- Control of complete analysis campaign.
- Retain existing flexibility and transparency

A world class European Thermal Analysis Tool

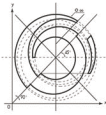


- After proto-typing, project was completely re-scoped to integrate existing tools.
- Current design drafted in Q3 1999.
- Project started formally in Q4 1999.
- Actual developments started late 1999, with announced schedule to launch Q2 2001.

Stop-start History



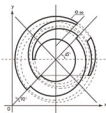
- ESATAN developments 80% completed.
- CAD interface 80% completed.
- Automatic Conductor Generation (phase 1) 70% completed.
- Platform independent model data store 80% completed.
- ESARAD sub-modelling 70% complete.



Progress Issues

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- ESARAD infrastructure improvements caused 5 month delay in overall project 'POLYTAN'.
- Scope to complete to be revisited over next month.

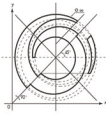


Work Remaining

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- Missions developments (>ESARAD v4.2)
- Case control mechanisms.
- Further infrastructure improvements.
- Visualisation replacement (to be confirmed).

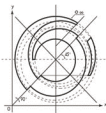




POLYTAN Future Schedule

ALSTOM

- Post ESARAD v4.2 release review of scope to complete POLYTAN phase 1 project.
- Global review of release schedule during December 2000 - announcement by year end.
- POLYTAN is a project not a product
 - Phased release of functionality into ESARAD and ESATAN from now on.
 - Redefinition of boundary between tools.



Likely Future Direction

ALSTOM

- Small phase 2 development of 'POLYTAN'.
- More focus on process integration.
- Post-processing developments.
- Greatly reduced ESA support/input.
- 'Customer specific' developments.
- Consultant services.



