

Army Membership in PDES Inc.  
to  
Product Data Functional  
Coordinating Group (PD FCG)

Venus Video Teleconference

21 Nov 00

1300-1430 Eastern Time

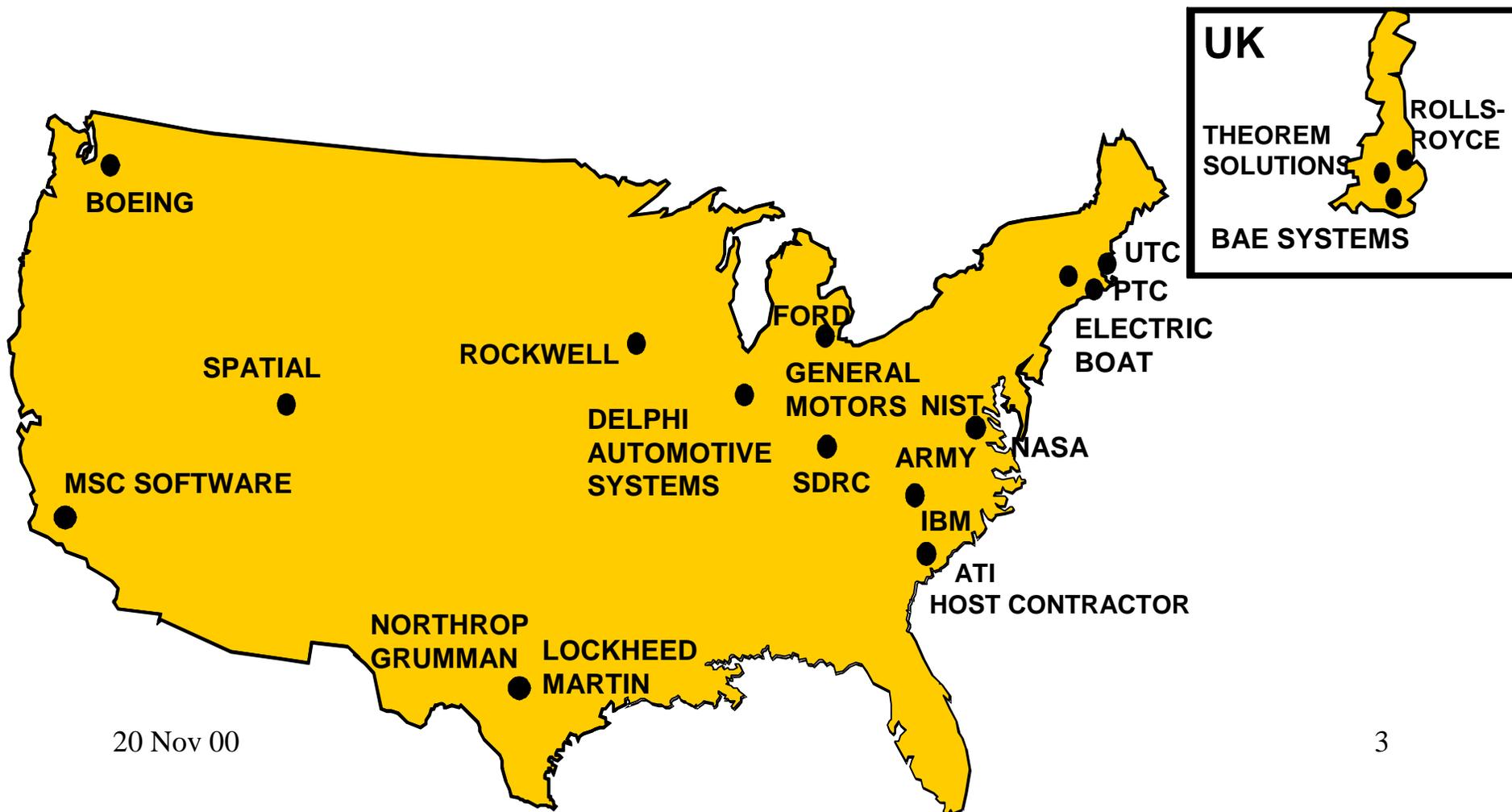
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20 Nov 00

# What is PDES Inc.?

- PDES = Product Data Exchange using STEP
- (PDES) Inc. is an international government/industry consortium accelerating the development and implementation of STandard for the Exchange of Product model data (STEP) to improve product quality, increase flexibility, reduce product cycle time and reduce costs

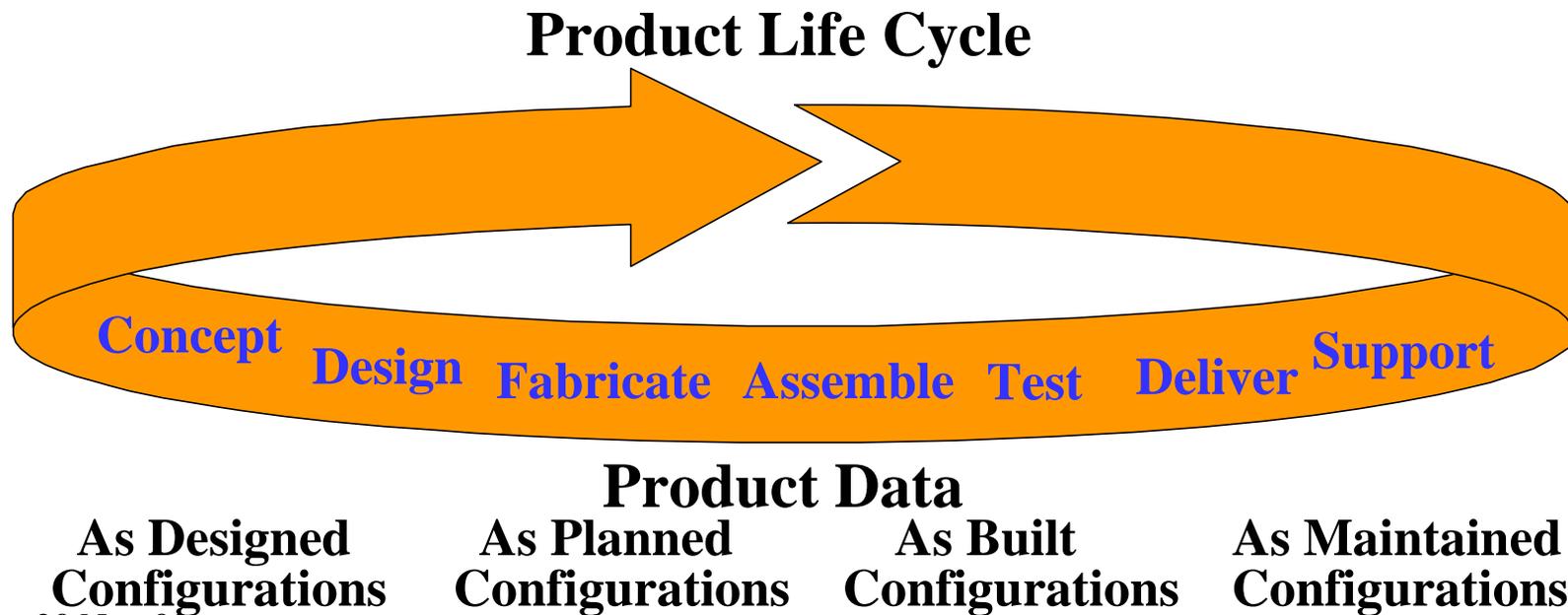
# PDES, Inc. Members



20 Nov 00

# What is STEP?

**STEP is an international standard (ISO 10303) that provides an unambiguous, computer interpretable definition of the physical and functional characteristics of a product throughout its life cycle**



# Role of STEP

- Enables consistent and timely data sharing between customers, prime vendors and suppliers
- Enables complete and accurate data exchange and use between functions (Design, Analysis, Mfg, Product Support)
- Enables reuse of design, planning and manufacturing data between different designs
- Can be a solution to access of long-term data archives

# PDES, Inc. Approach

- Develop and implement member company-defined work tasks
- Organize the work into projects with deliverables and schedules
- Use contributed company personnel
- Work with the established National and International standards structure
- Establish formal relationships with other significant organizations, programs and consortia
- Pursue funding for complementary projects

# STEP Products

## **CURRENT:**

- STEP Application Protocols (AP) for exchange between CAD systems
  - Each AP addresses needs of different types of parts
- STEP Translators for CAD software
- PDM Schema

## **FUTURE:**

- Expand STEP to PDM systems
- Expand STEP web applications
  - STEPml - library of XML specifications for STEP models
- More Information at <http://pdesinc.scra.org/>

# Army Involvement

- Army member of PDES, Inc. since Jul 93.
- Current annual membership requirements:
  - 2 Full Time Equivalent (FTE) of effort on PDES, Inc. work tasks, or
  - 1 FTE of effort + \$25,000
- Army “work-in-kind” support has previously come from CECOM-Tobyhanna Army Depot, and OSC-Watervliet Arsenal.

# Army Worktasks

- **On-going:**
  - AP 210 Test Suite prove out: Estimated at less than 0.5 FTE for current reporting period. Performer Tobyhanna Army Depot
- **Prior Years:**
  - Support AP 210 development
  - Support AP 203 development

# Current Status of Army Involvement

- Army in arrears for 4,358 hrs of work-in-kind effort
- Army membership renewed 30 Sep 00
- If Army is to continue its membership in PDES Inc., the Army must provide the required work-in-kind support.
- Must create synergy between PDES Inc and Army product data exchange goals

# Continued Membership gives the Army:

- Opportunity to work closely with industry customers/suppliers to leverage collective efforts
- Access to comprehensive vendor test bed (major CAD and PDM systems)
- Direct influence on setting the standard
- Allows for STEP product testing in a dynamic environment over the Internet
- Access to extensive lessons learned from STEP deployments in industry
- Insight into industry Enterprise Integration strategies
- Hands-on experience in using STEP tools and technology

# Commitment

Recommendation: That Senior Engineers approve continuation of Army membership in PDES, Inc.-

Senior Engineer approval of this recommendation on 10 Aug 00: means:

- HQ AMC support for PD FCG request for AMC central funding for new efforts and Executive Board membership
- MSC senior management allocation of MSC resources
- Long term commitment (minimum of 2 years)

# Status of Army Membership in PDES, Inc

- Membership extended via STRICOM allocation of \$25K and award before 30 Sep 00, on AMCOM task order with PDES, Inc. (ATI)
- Additional money or level of effort needed to meet AMC Senior Engineers commitment of 10 Aug 00.
- Request your assistance in identifying efforts that advance or implement STEP that could qualify for “work in-kind” towards PDES, Inc dues.
- CECOM has identified a Concept for proposed project. CECOM will be present Concept and request PD FCG feedback and participation in this project or other related efforts at 21 Nov 00 Venus VTC.

# Back-up Charts

# Recommended Course of Action

That Senior Engineers approve continuation of Army membership in PDES, Inc.-

- **PDES Inc. Executive Board Membership**
  - MSC attendance on 1 year rotation basis (CECOM first)
  - Two meetings per year (estimated 0.1 FTE per year)
- **Work-in-kind (2 FTEs)**
  - AMC buys-off our “arrears” condition (\$60.5k)
  - AMC pays \$25k annual fee for 1 FTE
  - AMC uses full-time support contractor to support PDES Inc (\$100k)
  - Review other on-going Army efforts that might qualify as PDES Inc. tasks (ex- STAMP, TIGER). Seek PDES Inc. concurrence.
  - MSCs propose new projects that meet both PDES Inc. criteria and Army goals

# Possible new PDES Inc. Worktasks

- **Common Product Data Management Model (PDMM)** - Create a schematic that depicts all the pieces of product data information and their relationship and/or dependency to each other. Can provide different views of the data set based on user functional needs.
- **Harmonization of Product Data Models** - Examine existing MIL-STD-2549 and PDM Schema product data models and work to resolve differences and voids.
- **Translators between CAD systems and BRL CAD** - Use STEP approach to establish translators to BRL CAD from to CAD systems used within AMC and it's vendor base. Can provide ARL, PEO/PM, and MSC lethality and survivability efforts with labor savings based on improved translations.
- **Others** - to be developed at 21 Nov 00 Venus VTC and follow - on efforts

# Results of Senior Engineers Meeting

(10 Aug 00)

- All agreed that we should continue our involvement with PDES, Inc, asking for funding from OSD and a concentrated effort by the MSCs to find work-in-kind that was acceptable to PDES, Inc.
- The group agreed:
  - The effort was important and should be supported,
  - Alternative sources of funding should be pursued:
    - ***OSD Standardization Program has a data call out for projects under \$500K***
    - Brigade Combat Team Transformation
    - Lou Kratz – ADCS funding
    - Henry Turner/Col Layman
  - If necessary, each command to ante up 25K to cover 1 year's cost (preferably before the end of the fiscal year).
- **ACTION:** AMCRDA-TE will prepare correspondence to continue our involvement with PDES, Inc.