

- May 18, 1999 Received approval to become "IS" (official ISO International Std.)
- May 25, 1999 New NASA policy requires STEP support in CAD/E/M tools (cites AP210 and other APs as preferred standards)
- June 4, 1999 ITI announced beta-version of AP210 translator for Mentor Graphics
 - Almost 900 designs tested to date
 - 93% success rate

Handout 4b.2



NASA Adopts AP210

NASA ADOPTS ISO 10303 FOR DATA EXCHANGE

May 25, 1999

The NASA Chief Information Officer has officially approved and released NASA-STD-2817, which includes the requirement for Computer-Aided Engineering, Design and Manufacturing systems used by NASA to have interchange tools that support ISO 10303 (commonly referred to as STEP, Standard for the Exchange of Product Model Data). *Tools that enable data interchange, compliant with these STEP standards, must be available to all CAE/CAD/CAM users at each NASA Center*. STEP allows organizations to effectively exchange information with their worldwide partners, customers and suppliers.

The purpose of this NASA standard is to establish the minimum tool suite for data interchange standards to support interoperability among the engineering design and manufacturing communities of NASA. This standard, called "Computer-Aided Engineering, Design and Manufacturing Data Interchange Standards", *cites several application protocols (APs) within ISO 10303 as preferred standards. These standards include AP203, AP209, AP210, AP225, and AP227* for exchanging data among product data management systems, mechanical and electronic CAD/CAM systems, civil and facilities CAD systems, and computer-aided engineering/analysis systems.

NASA is a member of PDES, Inc., a joint industry/government consortium specifically formed to accelerate the development and implementation of STEP. PDES, Inc. consists of over 20 major industrial companies and government agencies that represent over \$600 billion in annual revenue. A member of PDES, Inc. since 1997, NASA is a leader in many areas of STEP development, including domains such as engineering analysis, electronics design, and electromechanical subsystems integration.

Bob Kiggans, General Manager of PDES, Inc., said, "The release of this standard is a real milestone for the STEP community. It basically says that if you want to exchange data with NASA, ISO 10303 is the way to do it."

NASA is dedicated to exploring space and committed to spreading the unique knowledge that flows from its aeronautics and space research. NASA's STEP expertise comes primarily from their Goddard Space Flight Center, which serves the scientific community, fosters education, and stimulates economic growth. They partner with others to achieve NASA's goals and create technologies that support and advance these goals to take full advantage of doing research in space.

For more information:

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AP210 Translator Reaches Beta Status

Industry's First Commercial Translator for STEP AP210 Achieves Beta Status

Delphi Delco & Boeing Achieving Breakthrough Translation Results

MILFORD, OH; JUNE 4, 1999 -- International TechneGroup Incorporated (ITI), the world's leading provider of product data interoperability solutions, reports that the company's STEP AP210 product data translator has reached beta status. This development program represents industry's first commercial translator for STEP AP210. AP210 (ISO/IEC DIS 10303-210) is the new standard for electronic assembly, interconnect, and packaging design.

The AP210 translator provides bi-directional data exchange between STEP (Standard for the Exchange of Product Model Data) and Mentor Graphics Corporation's software program Board Station. Development is based on ITI's product data exchange library PDE/Lib. PDE/Lib is a comprehensive suite of software modules for developing translators and applications based on today's popular standards. PDE/Lib includes interfaces for STEP, IGES, DXF/DWG, VDAFS, ACIS, and Parasolid.

Organizations such as The Boeing Company and Delphi Delco Electronics Systems have translated nearly 900 designs with a 93% success rate. These companies are using STEP AP210 as a common data format to enable data exchange to support capabilities such as producibility analysis, concurrent mechanical and electrical engineering, and integrating the printed circuit board assembly supply chain.

"STEP continues to solidify itself as a viable data exchange solution for today and beyond," explained Donald Hemmelgarn, Vice President of ITI's Product Data Interoperability business. "The successes achieved with this STEP AP210 translator further demonstrates STEP's maturity and versatility."

About STEP STEP (Standard for the Exchange of Product Model Data), is an international standard (ISO 10303) that provides manufacturers with a reliable way of exchanging a broad range of product data with their customers and suppliers. It is especially effective in giving all users easy access to information related to the entire product life cycle from design and engineering, to manufacturing, marketing, and beyond. STEP is a project of the International Standards Organization to develop mechanisms for representing and exchanging a computerized model of a product in a neutral form. STEP AP210 enables the exchange of Configuration Management, Requirements, Functional, Layout, Assembly, Process Technology, Material and Layer Stackup information.