UN/ECE WP 6
International Model for Technical Harmonization
Earth-Moving Machine Safety

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Outline of Presentation

- Earth Moving Machines
- International Model for Technical Harmonization
- Experience With Model
- Improvements for Compliance Clause
Earth-Moving Machines (EMM)

Machines for Excavating, Loading, Transporting, Spreading and Compacting Earth and Other Materials.
Earth-Moving Machines

- Global Industry
- Multiple National Requirements Are Challenge for Low Volume Industry
- Industry Promotes
  - High Safety Level
  - ISO Standards as National Standards
  - Technical Requirements for Regulations from ISO Standards
Industry Associations From EU, USA, and Japan Worked Together to Develop an International Model for Earth-Moving Machines in 2004.

The International Model Outlined General Principles for Technical Regulations Following the WP 6 Guidelines.

The International Model Is Based on the Technical Requirements From the ISO 20474 Machine Safety Standard.
UN/ECE WP6
International Model for EMM

1. **Scope Statement** – Applies to Earth-Moving Machines Defined by ISO 6165


3. **Compliance Clause** – Use Supplier’s Declaration of Conformance (SDoC) Defined in ISO 17050 Parts 1 and 2

4. **Market Surveillance** – National Level
General Experience Promoting
UN/ECE International Model

- Currently Working With China, Russia, India, Korea, and Chile.
- ISO/TC 127 Standards Are Accepted as National Standards, With Some National Differences Due to the Culture, Social and Technology Level
- The General Principles of the International Model Regulation Can Be Applied to Different Types of Regulatory Processes.
- Additional Guidance is Needed for the Compliance Clause in International Model
Conformity Assessment Experience

- The USA, Japan, and Other Areas Accept the Manufacturer’s Commitment of Conformity Assessment
- Europe Has New Approach Directives
  - The New Approach Directives Emphasize the Use of Harmonized Standards
  - Recommends Conformity Assessment by the Manufacture
  - SDoC is Accepted for EMM (ISO 17050)
- Developing Economies Generally Do Not Accepted SDoC, But Require Third Party Certification
Conformity Assessment - Challenges in Developing Economies

- Manufacturers So Far Are Not Trusted to Do Their Own Compliance Declaration
- Some Small and Medium Manufacturers Are Considered to Need Help With Conformity Assessment and Certification
- Resources for Market Surveillance Are Limited and a Third Party Conformity Assessment and Certification Process Is Considered As a Way to Compensate for the Challenges With Market Surveillance
Improved Conformity Assessment

- Long Term Goal Still Is Manufacturer Compliance Commitment - Supplier’s Declaration of Conformity
- In Some Economies Where Manufacturers Are Not Prepared to Do SDoC or Are Not Trusted Yet to Do SDoC, the Assistance of a Third Party May Be Necessary for Conformity Assessment.
- For These Economies, the Manufacturer Can Work With a Third-party for Conformity Assessment. Conformity Assessment Testing That Has Already Been Done by the Manufacturer Can Be Used If the Manufacturer Has the Following:
  - A Quality Plan That Is at Least Equivalent to ISO 9000
  - A Documented Conformity Assessment Process
  - A Conformity Assessment Group to Manage the Conformity Assessment
  - Access to Conformity Assessment Facilities (Internal or External)
Summary UN/ECE Project

- Global Harmonization of Machine Requirements Based on ISO Standards Allows Global Market Access for All Manufacturers
- Allowing Some Regional Differences Is Beneficial For Developing Economies
- Conformity Assessment Is Still a Challenge
- The Proposal in the UNECE International Model for EMM Addresses This Challenge
  - Maintain Long Term Goal of SDoC
  - Recognize the Need for Third Party Assistance
  - Promote Cooperation Between the Third Party and the Manufacturer to Minimize Conformity Assessment Time and Cost