



U.S. Department of Transportation
Federal Highway Administration



**American Association of State
Highway and Transportation Officials**

Attachment 4

SCAN PROPOSAL FORM

Joint AASHTO/FHWA International Technology Scanning Program (FY2006-2007)

Proposing AASHTO Committee(s), FHWA Office(s) and/or FHWA Resource Center(s) :

FHWA Office of Freight Management and Operations (HOFM)
AASHTO Subcommittee on Trucking Operations (Size and Weight)

Contact person(s) for scan, including contact information (please include address, phone and e-mail):

Mr. Robert Davis, Office of Freight Operations, 202/366-2997. Robert.Davis@FHWA.dot.gov

Title of proposed scan:

“Evaluation of contemporary European procedures and technologies for enforcing commercial motor vehicle size and weight laws and regulations”

Scan purpose and objectives:

The purpose of this scan is to review and evaluate contemporary European procedures and technologies for enforcing commercial motor vehicle size and weight laws and regulations. In recent years, declining State revenues and reduced levels-of-effort expended for size and weight enforcement have compelled a look for, and promotion of, innovative procedures and emerging technologies to help States sustain or even increase size and weight enforcement levels with reduced resources. The objective is to identify cost-effective procedures and technologies that will help our State transportation and enforcement officials more efficiently and effectively accomplish their tasks of overseeing commercial truck and bus compliance with size and weight laws. This ability will better protect highway infrastructure from premature deterioration, ensure road safety, and provide valuable data for new highway infrastructure and enforcement investments.

Background:

The United States continues to experience heavier and more frequent commercial motor vehicle load movements. State issuances of overweight permits for loads in excess of the Federal and grandfathered State limits have increased steadily, the total having grown by over 13% since 1997. The year 2003 saw over 3,500,000 permits issued throughout the United States, with a substantial increase in the issuance of multi-use, or annual, permits¹. Similar to the growth of overweight permit issuance, registered commercial vehicles and vehicle miles traveled continue to increase. According to FHWA’s Freight Analysis Framework, the nation’s highway system, and our enormous truck fleet, moved 71 percent of the total tonnage and 80 percent of the total value of U.S. shipments in 1998. Trucks are expected to move over 75 percent more tons in 2020, capturing a somewhat larger share of total tonnage². Despite the heavier and more frequent truckloads, State issued citations and civil assessments for overweight violations have dropped by over 31% since 1998. The largest number of infractions cited was seen in 1999 with nearly 720,000 citations issued. In contrast, in 2003 this number was down below 516,000 citations³.

As both the European Union (EU) and North America face the significant growth in domestic and international commerce, there is overwhelming evidence on both continents of increasing road congestion and delay. The current levels of congestion and delay are adversely affecting the efficiency and velocity of supply chain delivery with the attendant negative economic consequences. Effectively targeting size and weight enforcement efforts can contribute to improving supply chain velocity. Additionally, this increase in

¹ Source: FHWA Size & Weight Certification Data

² Source: FHWA Freight Analysis Framework

³ Source: FHWA Size & Weight Certification Data

commercial traffic and the limited ability of all governments to finance new road-miles means greater pressure on the existing infrastructures of the two continents. The ability to cost-effectively and efficiently enforce vehicle size and weight requirements to prevent unnecessary and premature road damage is a key strategy to ensure that diminished infrastructure due to overweight abuse does not compound our growing infrastructure capacity problems.

Scope:

As noted in the title, this scan will be limited to the industrialized nations of the EU. This scope is chosen due to a common legal system (i.e., the procedures and technologies should be evaluated for compatibility with a common legal system and an ability to withstand legal scrutiny) and a transportation system at a common state of development (i.e., the ability to integrate the technology into an existing system).

Structure:

This scan will examine the procedures and technologies for enforcing commercial motor vehicle size and weight laws and regulations across the surface transportation system. It will include a review of these efforts in both an intercity and urban environment and also the collection and analysis of size and weight data.

Deliverables:

The scan tour will identify procedures and technologies for enforcing commercial motor vehicle size and weight laws and regulations that are adaptable to the U.S. surface transportation system.

Benefits expected, including potential impacts on current technology or procedures:

This scan is primarily designed to identify cost-effective and efficient size and weight enforcement procedures and technologies practiced in the European Union (EU) that can be evaluated for their application to the U.S. and NAFTA surface transportation arena. Evidence indicates that emerging EU procedures and technologies (e.g., third generation weigh-in-motion devices that can produce reliable evidence of violations capable of withstanding legal challenge; performance-based enforcement procedures; and innovative public-private funding practices for new devices and activities) may offer the U.S. opportunities for enforcement improvements not readily known or available here. Also, the EU's attempts to harmonize the disparate administrative and operational size and weight procedures among its member countries may offer us insightful information about creating compatible procedures and policies across States and NAFTA boundaries.

How the proposed scan fits into AASHTO and/or FHWA strategic goals:

One of FHWA's national performance objectives for mobility and productivity calls for longer-lasting highway structures. This objective is being pursued through preventative maintenance, size and weight enforcement, rehabilitation, and replacement. The requested size and weight scan dovetails with this objective by evaluating EU procedures and technologies that cost-effectively support better infrastructure preservation and reduced maintenance and rehabilitation costs. To the extent that it can, the scan will also assess possible "metrics" devised by member states to quantify road damage by vehicle weight; evaluate programs to plot system damage occurrence and respond to effects of overweight operation; and consider EU initiatives on pavement design that may sustain greater vehicle weights longer.

Numerous AASHTO objectives are promoted with this proposal:

- The enhancement of safety nationwide (Objective 1D) by the introduction of procedures and technologies that will more readily identify and remove overweight vehicles from the roadway, lowering the vehicles' incidence of operation, reducing the accelerated wear they bring to road and bridge infrastructure, and thus ensuring safer highway usage.
- Identifying, communicating, and facilitating the use of emerging technologies and processes (Objective 3A) by bringing to State agencies cost-effective measures that can leverage their ability to undertake effective size and weight enforcement within current fiscal constraints.
- Identifying and advancing 21st century management techniques (Objective 4A) for the benefit of our State partners.
- Developing tools to assist States in confronting issues of core competencies, downsizing, and outsourcing (Objective 4C) by helping them to sustain enforcement activities during these times of staff reduction and resource constraints.
- Developing customer-driven delivery models in the areas of system operations and management (Objective 4G) by demonstrating, through FHWA's Freight Professional Development Program, peer-to-peer initiatives, and other outlets the application of these European procedures and technologies

Date: March 15, 2005

Signature of respective AASHTO Committee Chairman, FHWA Associate Administrator or FHWA Director of Field Services:

Jeff Paniati, Associate Administrator for Operations, FHWA

Please forward both the electronic version (via e-mail) and signed hard copy (via mail or fax) of your proposal to:

FHWA – Office of International Programs (HPIP)
400 7th Street, S.W. – Room 3325
Washington, D.C. 20590

Tel: (202) 366-0111
Fax: (202) 366-9626
E-mail: [international @fhwa.dot.gov](mailto:international@fhwa.dot.gov)