

Roles of ITS in new approaches to compliance with laws and standards for road freight transport

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A comprehensive approach to compliance must include

- privileges and incentives-based strategies which encourage industry to take responsibility for its own performance
- consistent, effective and well-targeted enforcement
- monitoring compliance levels and the effectiveness of compliance/enforcement outcomes



The trend in trucking enforcement is

- electronic detection of non-compliance
- use of IT to gather and apply information on patterns of behaviour, to enable the focussing of enforcement resources on high-risk drivers and operators
- imposition of legal requirements on off-road parties with control over truck operations.

This trend is building entirely on the growth and effectiveness of ITS systems as the following examples will demonstrate



Key Observations

ITS systems in trucks or in the infrastructure are efficient tools for control and monitoring of compliance with regulations.

ITS systems enable drivers and operators to self-monitor any trip and ascertain compliance with regulations.

Databases of control and safety records enable authorities to target controls efficiently on high risk trucks with minimum disturbance of complying companies.

The chain of responsibility concept relates breaches of limits on speed, working hours, gross vehicle mass etc. to conditions which can implicate all with influence on the transport task.



ITS Systems for use in on-the-road control of regulations of trucks and trucking

- Weigh-in-motion for measuring truck axle loads
- On-board axle load measurement systems
- On-board digital recording system for control of rest and working schedules etc.
- RFID tags and Automatic Number Plate Registration system (ANRS) for electronic vehicle identification
- Truck position and tracking systems for network access control



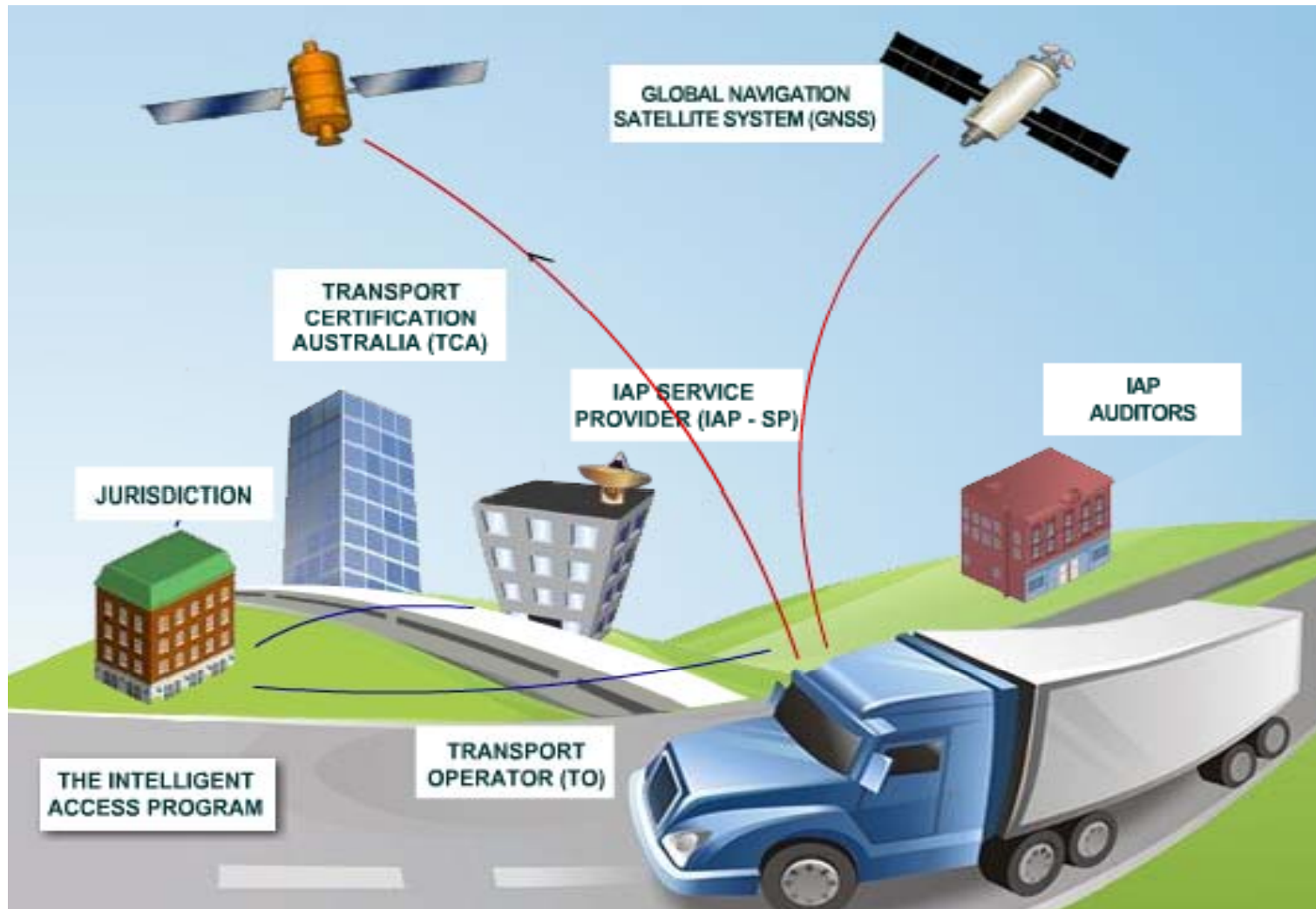
Databases for targeted control and inspections of high-risk drivers and trucking companies

- Registration of breaches and observations of unsafe driving, fatigued driving, driver fitness, driver impairment, truck maintenance, cargo securement, crash involvement.
- Safety classification of carriers and drivers based on current status of such registrations.
- Direct access to database from roadside inspection sites.
- Screening of trucks for control by safety rating.



ITS Systems for drivers' and operators' self-monitoring of compliance

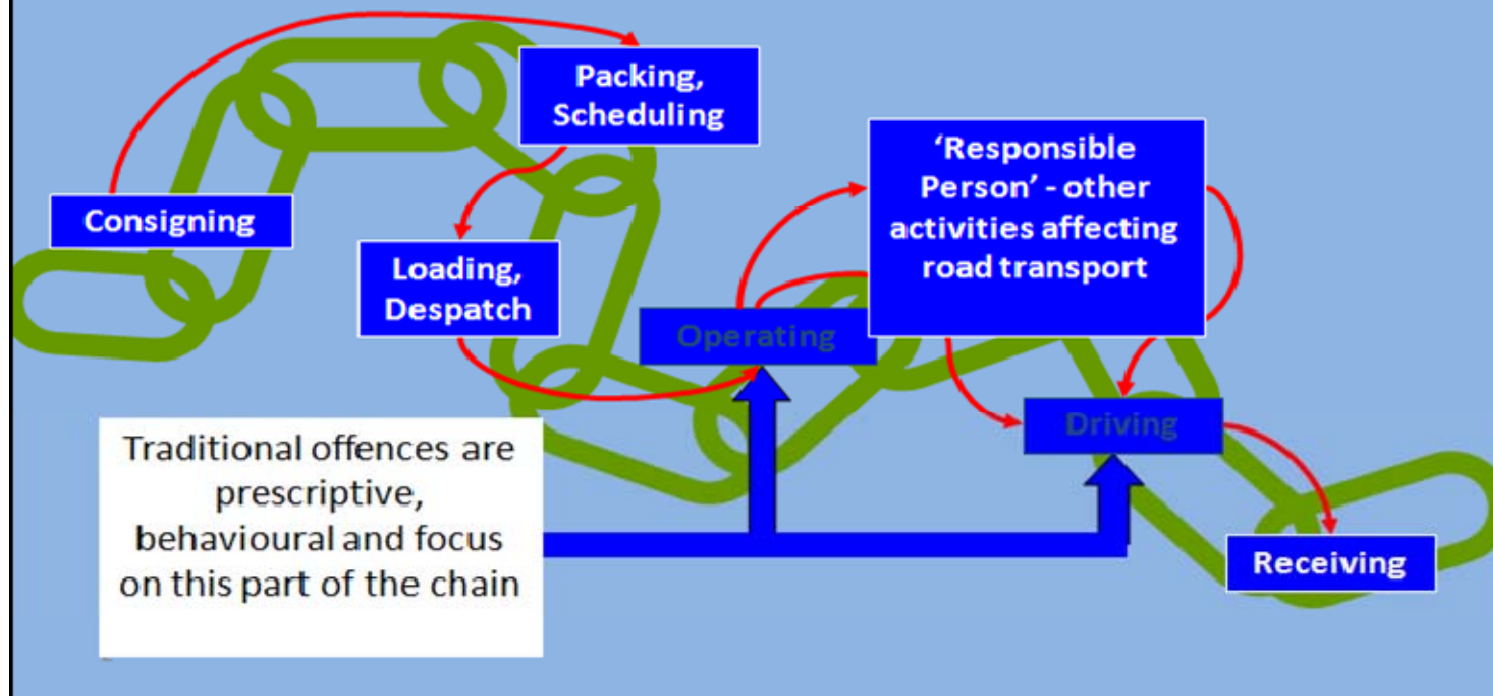
- On-board vehicle condition measurements (axle loads, brake stroke, tyre pressure)
- GPS based Intelligent Speed Adaptation
- Mobile communication systems to enable operators safety manager to check conditions
- Link for third party control of vehicle position under Intelligent Access Programme



Chain-of-responsibility concept and procedure

- *“all who have control, whether direct or indirect, over a transport operation bear responsibility for conduct which affects compliance and should be made accountable for failure to discharge that responsibility”*
- Records identify carriers, transport types or industry sectors with high propensity for breaches
- Warrants to inspect and search vehicles for documents
- Warrants to inspect and search premises of carriers, consignors and customers
- Compulsory acquisition of business records from responsible parties
- Enforcement along the entire chain of responsibility

Compliance assurance: Chain of Responsibility





NSW Grain Harvest: Impact of Sector-wide Investigations

	Legal	Minor Overload (up to 5%)	Substantial Overload (5% to 20%)	Severe Overload (more than 20%)
2005 Grain Harvest	67.6%	12.0%	17.4%	3.0%
2007 Grain Harvest	82.5%	17.1%	0.3%	0.1%



**Thank you for the
attention**