

***IRTEENZ CONFERENCE
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**WHAT THE INDUSTRY (MAY) NEED FROM
TRANSPORT ENGINEERS
Reshaping the Operator/Engineer Relationship**

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TRANSPORTATION, SAFETY, COMPLIANCE: THE BEGINNING 1899?



Electric Vehicle Company Taxis in NYC

THE RIGHT STUFF: ENGINEER OPERATOR RELATIONSHIPS

■ ENGINEERS:

Skill

discretion

competence

imparity

business ethics

legislative knowledge

Regulatory gatekeeper

■ OPERATORS:

Provision of all detail – clear instructions

Confidence in understanding solutions offered

Understanding service life and maintenance limitations

THE HISTORICAL RELATIONSHIP

■ THE FORMER YEARS:

- Limited equipment choices encouraged innovation, inventiveness and entrepreneurial aspiration heavily reliant on collaborative solutions
- Development of engineering disciplines in design and fabrication to meet safety and reliability expectations of users
- Development of Standards for components and modifications of vehicle systems to meet public policy safety compliance requirements
- Relationships “strained” under pressure of new regulatory environment

THE DEVELOPMENT YEARS

■ MID 90s TO LATE 2000s

- Full exploitation of 44 tonne/20m regime
- Fleet standardisation relatively common by mid 2000s
- Use of CAD and vehicle dynamics packages (PBS) commonplace – plus economic woes resulted in some operator disengagement in design process
- Drawn out HPMV policy development 2000 to May 2010 didn't help encourage existing relationships

■ POST MAY 2010 – THE UPSWING

- Development of pro-formas – a joint industry partner approval programme
- Rekindling of operator interest in customised solutions
- Maturing of operator relationships with engineering suppliers
- Some missteps, the difference between imagination and reality, particularly related to permit operation and 2012 RUC system

A FUTURE RELATIONSHIP SCENARIO – TALKING POINTS

- Existing examples where engineers support operator's HPMV applications and HPMV compliance processes etc – stepping stones
- Integration of electronic systems and technology convergence will drive equipment and transport service delivery efficiencies
- Benefit based or risk based systems/accreditation coupled with public policy expectations will impose additional compliance disciplines
- Need to have professional analysis in terms of resolving complex compliance issues
- Reshaping or rebundling the operator/engineer relationship cannot be overlooked

CONCLUDING COMMENTS

- The common carrier/transport operator business will continue to evolve
- Accreditation and co-regulatory arrangements will necessitate additional capability to meet the compliance challenges
- Potentially a more interactive operator/engineer relationship could result
- Costs and patchy enforcement processes weaken the credibility of this scenario
- Therefore the question of whether this occurs is open to further debate, but compliance challenges in some form will still be there

Tail Piece: Innovation for the equipment and vehicle devotees



Boeings V22 Phantom Badger