

Technology Assessment

***Which relation with the high-speed train
technological development?***

strategic intelligent management tool

Ponto de situação de tese

by Susana Moretto, PhD Candidate in FCT (Portugal) and visitor at SEM-Tongji (China)

PhD TA Conferência Doutoral 2013, FCT-UNL, Lisbon

s.moretto@campus.fct.unl.pt

Supervisor Professor Prof. A.B. Moniz (FCT)

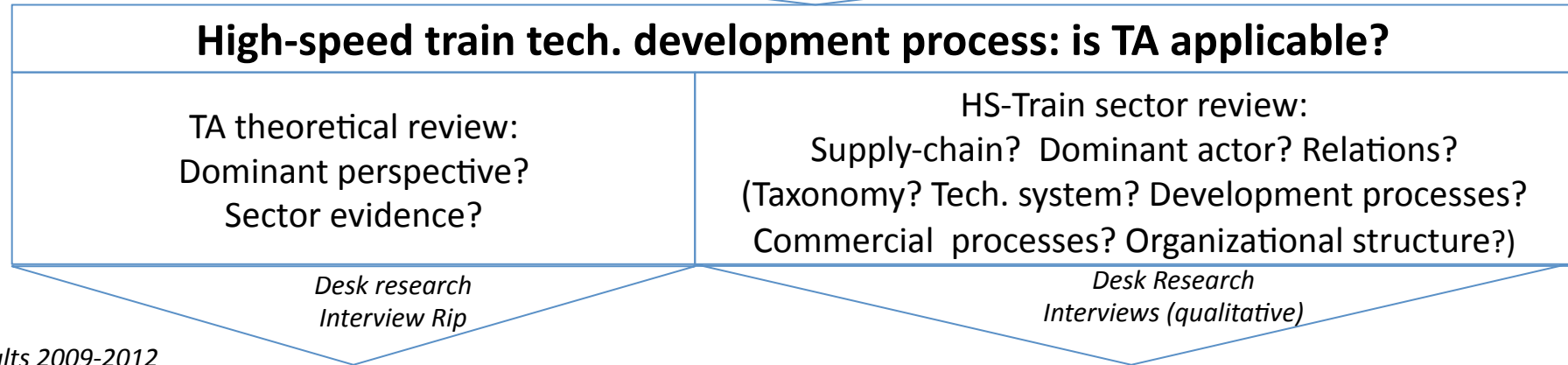
Co-supervisors Prof. M.S. Pereira (IST), Prof. R. Macário (IST)

Diagram 2009-2012

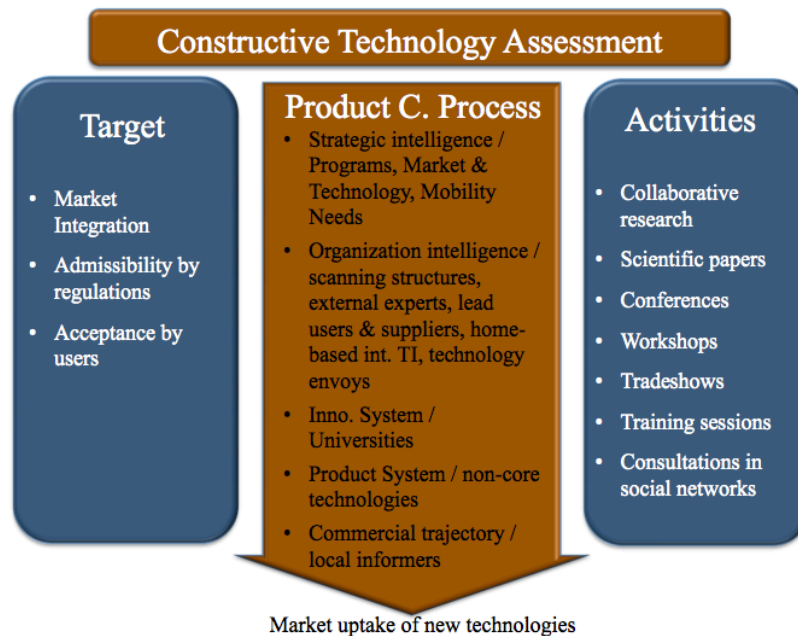
Problem

High-speed trains: difficulty in market uptake of innovative solutions

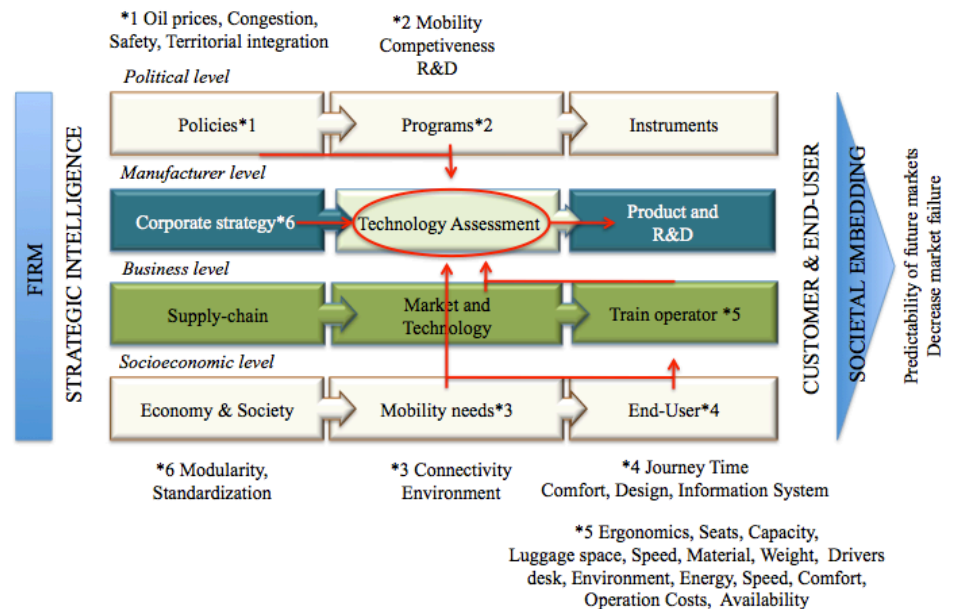
Research questions



Results 2009-2012



Strategic Intelligence



Reference Publication

S. Moretto, A. Moniz, A. Pastrana (2012) Constructive Technology Assessment in Railways: The case of the High-speed Train Industry. International Journal of Railway Technology

TA: Technology Assessment

Diagram 2012-2014

Problem

High-speed train: market uptake of innovative solutions

Research questions

High-speed train tech. development process: TA model?

CTA theoretical review:
Technical paradigm? Sociotechnology paths?
Technology transitions? Product-use
combination?

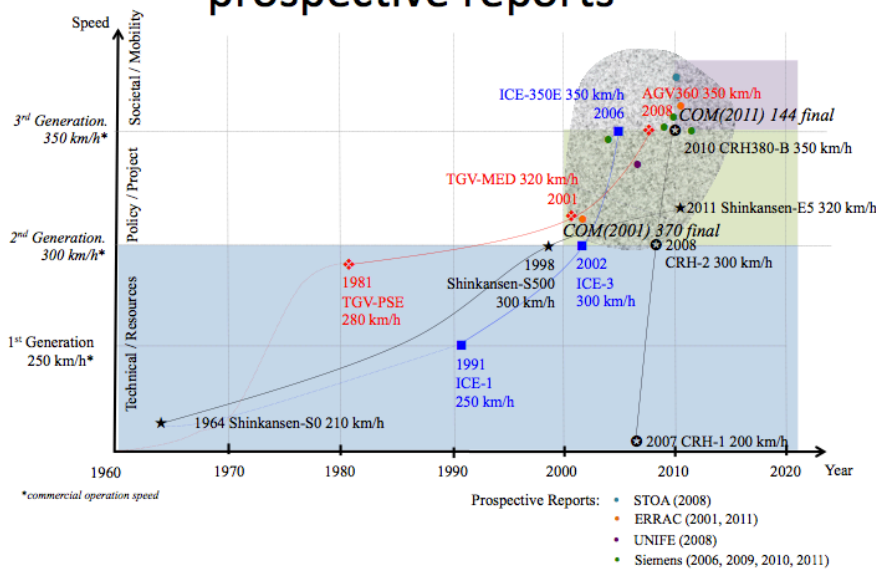
HS-Train sector review:
Mutual dependencies among actors? Construction
of socio-technical scenarios? Model?

Desk research
Co-writing with Robinson

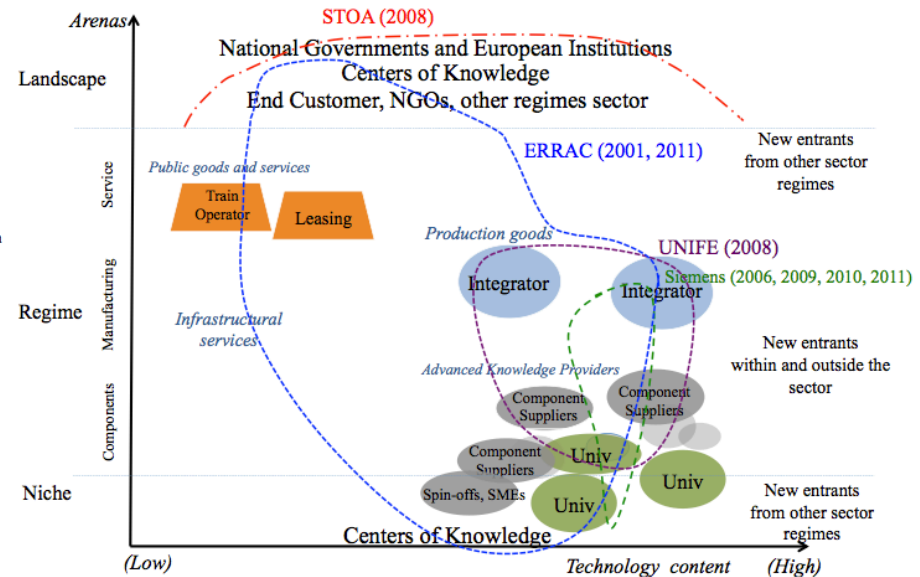
Desk Research
Interviews (qualitative)

Results 2012-2014

Vehicle generations and prospective reports



Supply-chain and Prospective



Reference Publication

S. Moretto, D. Robinson, A. Moniz (2013) Study: Futures in high-speed trains technological transitions: a landscape, regime and niche analysis. Target Journal TF&SC

Achievements

published scientific papers & articles 2009-2012

- S. Moretto, D. Robinson, A. Moniz (Study 2013) **Futures in high-speed trains technological transitions: a landscape, regime and niche analysis**. Target Journal TF&SC.
- S. M. Moretto, A. P. Palma, A. B. Moniz, (2012) "**Constructive Technology Assessment in the High-speed Train Industry: evidence from a case study**", in J. Pombo, (Editor), International Journal of Railways Technology Volume 1 – Issue 2, Civil-Comp Press, Stirlingshire, UK, 2012.
- Paper with peer-review: S. M. Moretto, A. P. Palma, A. B. Moniz (2012) "**Technology Assessment in the High-Speed Train Manufacturing Industry: Evidence from a Case Study**", in J. Pombo, (Editor), "Proceedings of the First International Conference on Railway Technology: Research, Development and Maintenance", Civil-Comp Press, Stirlingshire, UK, Paper 167, 2012. doi:10.4203/ccp.98.167.
- Paper with peer-review: S. M. Moretto (2011) "**Societal Embedding in High-Speed Train Technology Development: dominant perspective from a case study**", Enterprise and Work Innovation Studies, 7, IET, pp. 57 – 73.
- Paper with peer-review: N. Boavida, S. M. Moretto (2011) "**Innovation Assessment of a Portuguese railway branch of a foreign multinational: A case study**", Proceedings of the XIV Congreso Latino-Iberoamericano de Gestión Tecnológica – ALTEC 2011 (19-21 October 2011), Lima, Perú, Asociación Latino-Iberoamericana de Gestión Tecnológica, Pontificada Universidad Católica del Perú, Pages 339-587, 2011. ISBN 978-612-4057-48-9
- Paper with peer-review: N. Boavida, N. Cabrita, S. M. Moretto (2010) "**Análise do processo de participação pública no projecto da Alta Velocidade Ferroviária**". IET Working Papers Series, WPS06/2010:25. Universidade Nova de Lisboa, IET- Research Center on Enterprise and Work Innovation, Faculty of Science and Technology, 2010.

Thank you

s.moretto@campus.fct.unl.pt