

RAGTIME

General overview of RAGTIME

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RAGTIME

Risk based approaches for asset integrity multimodal transport infrastructure management



























Transportation Asset Management (TAM) has long been recognized as a sound, <u>long-term</u> approach to managing infrastructure. It provides decision makers with a rational, long-term <u>systematic</u> process for making difficult and complex decisions about how to achieve the <u>highest</u> system <u>condition levels</u> for the <u>lowest cost</u>, over the <u>longest term</u>.

Butch Wlaschin Director Office of Asset Management US Department of Transportation Federal Highway Administration



























Risk: The effect of uncertainty over the objectives *ISO*



























Why RAGTIME?

- o Infrastructure asset management generally focuses on the later stages of a facility's life cycle, specifically maintenance, rehabilitation and replacement;
- Risk-based approaches are not always integrated
- Network resilience perspective is not implemented throughout the lifecycle
- There is not a harmonized approach























Why RAGTIME?

An advanced asset integrity management is needed to meet transport future challenges:

- defining methods and tools for asset tracking along its lifecycle
- o determine the life cycle and replacement costs of the assets,
- assist in determining funding strategies, optimise capital investments in operation and maintenance,
- o help with the replacement of assets.





























RAGTIME: How?

We have developed a validated tool for multimodal infrastructure for their whole life cycle, addressing:

- Lean and innovative procurement processes
- Reliability, vulnerability, sustainability, safety, modularity, accessibility and adaptability concepts
- Risk-based approach processes
- Interoperability and Multiscale data model, capable of managing changing information across all systems,
- Smart Monitoring Systems embedded into the infrastructure

















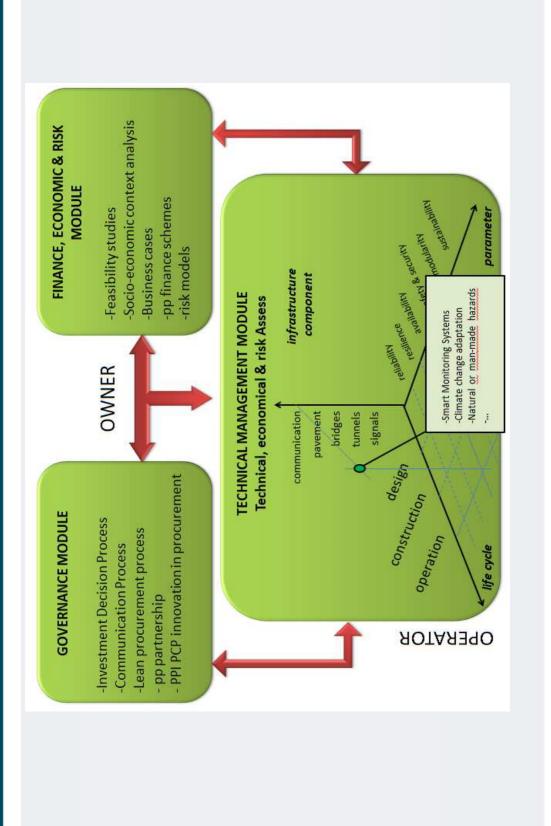








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Metwork Rail





RAGTIME outcomes

RAGTIME has laid out a validated whole system planning **software platform**, able to facilitate a holistic risk-based management of multimodal infrastructure throughout their entire lifecycle.























RAGTIME outcomes

The validation strategy applied to the UK, Italian and Slovenian case studies has enabled direct comparison of the project approach and results with current solutions/methodologies applied to a real renewal project.

























https://youtu.be/6JX6VLNnz2k?t=27



































www.ragtime-asset.eu