FAIR: Flood infrastructure Asset management & Investment in Renovation, adaptation, optimization and maintenance

Work Packages 3 and 5: Science supporting practice: Practice supporting science

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Maturity **Analysis**

Assessing the maturity of existing asset management activities to identify strengths and weaknesses



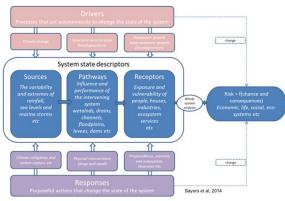
Source-Pathway-Receptor framework

| Charcateristic | Description (used to guide the self assessment process) |
|----------------|--|
| Ad hoc | Asset Owner has limited experience and is at a learning and development stage. |
| Repeatable | Asset Owner can repeat what it has done before, but not necessarily define what it does. $ \\$ |
| Standardised | Asset Owner can say what it does and how it goes about it. |
| Managed | Asset Owner can control what it does in the way of processes. It specifies requirements and ensures that these are met through feedback. |
| Optimal | Asset Owner is capable of learning and adapting itself. It not only uses experience to correct problems, and also to change the way it operates. |



System analysis

A structured approach to understanding the sources-pathways and receptors of risk



Performance analysis

Underpins a quantified assessment of present and future performance of the system and associated risks





performance of man-made and natural flood infrastructure



insights into current performance of flood protection infrastructure







insights into **future** performance of flood protection infrastructure

A whole system, whole life approach to asset management

&

FAIR Framework

strategy and operations through

Strategic perspective: takes a long term, system level, view. Long term plans are made and major investments made that balance cost, risk and performance. Such plans are based in an understanding of the threats and opportunities, objectives and functional requirements and measures necessary to achieve these

Operational perspective: asses the performance of existing assets, monitors and maintains that performance in accordance with desired performance levels, designs and constructs individual projects (that form part of the strategy) and undertake asset improvement measures.

Tactical handshake: ensures the connection between the two others is guaranteed and plays a pivotal role in the translation of asset performance to system/network performance, and the translation of an adaptive plan on system level to concrete measures for assets.

Strategic **Tactical** Operational perspective handshake perspective Monitor & Measures for system maintain Adaptive plan Performance of assets Design & construct Objectives & requirements Performance network Threats & Measures opportunities for assets

External Factors