



Data driven Asset Management for reduction of non-revenue-water

Ignaz Worm PhD | States General of the Green Economy 2024 | Rimini

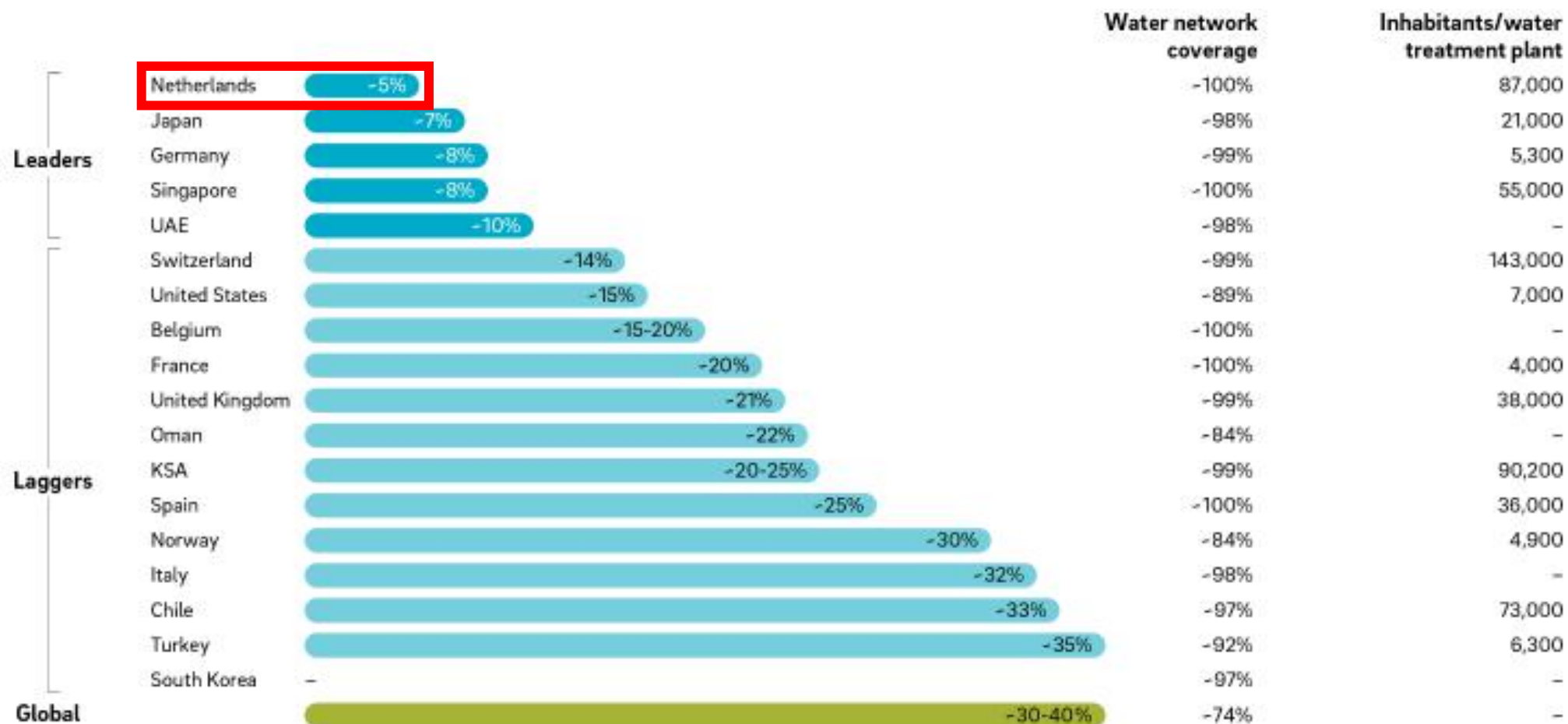
Team Spatial Insight



Asset Management software for Dutch and Italian utilities



The Netherlands, world leader in non-revenue-water



Source IEP, Yale, CNT, GWI, Secondary research

The Netherlands: country of water?

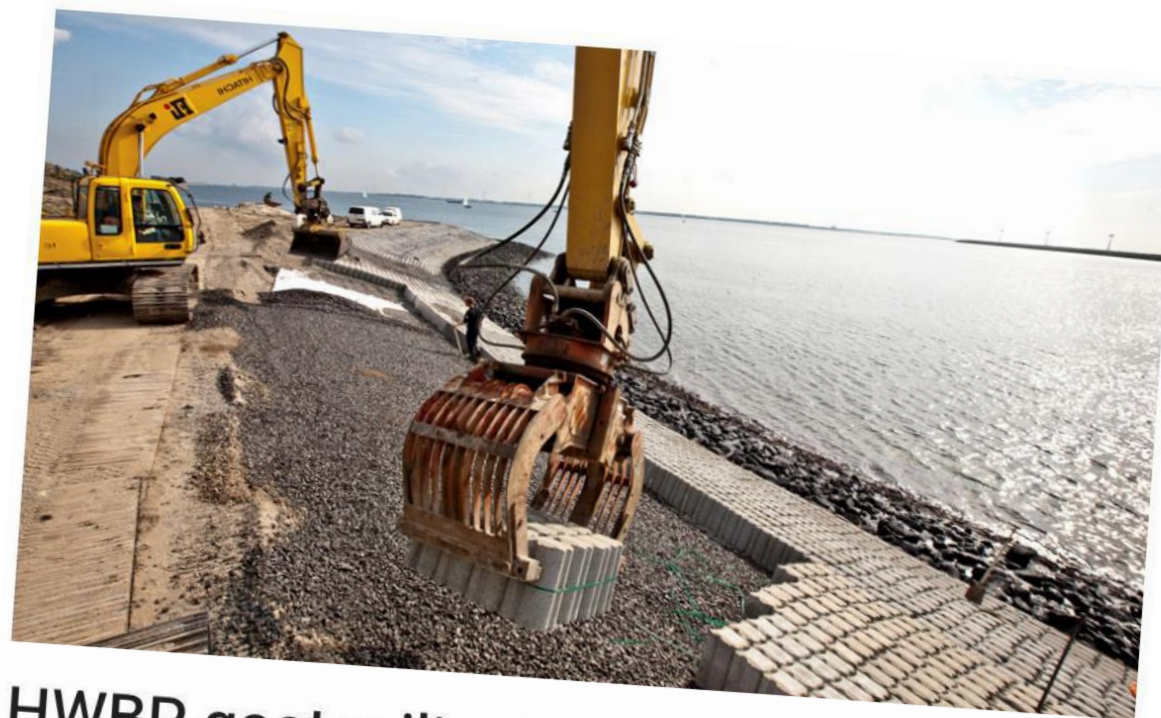


Yes, water management is undisputed and water is cheap

2000 km of water barriers needs to be strengthened, costing 24 billion euros.

These costs are a-political.

5 €/m³. Costs of water supply and discharge are low compared to energy and telecom and accepted.



HWBP gaat miljarden meer kosten: nog eens 500 kilometer primaire kering moet worden versterkt

H2O ACTUEEL · 08 NOVEMBER 2023

But droughts are threatening the drinking water supply



▲ Vorig jaar was het ook kurkdroog. De bodem van de oever van de Rijn was gescheurd door de droogte.
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Droogte zorgt opnieuw voor problemen: actie tegen vissterfte en blauwalg

De problemen door droogte en gebrek aan neerslag nemen toe. In verschillende delen van het land is al sprake van extreme droogte en geldt een sproeiverbod. Waterschappen nemen maatregelen. 'We moeten in de winter meer water opslaan'.

Grondwatervoorraad in Brabant onder druk

De grondwatervoorraad in Brabant staat al langere tijd onder druk. Dat is zorgelijk want we hebben dit grondwater nodig voor drinkwater, natuur, landbouw en industrie.

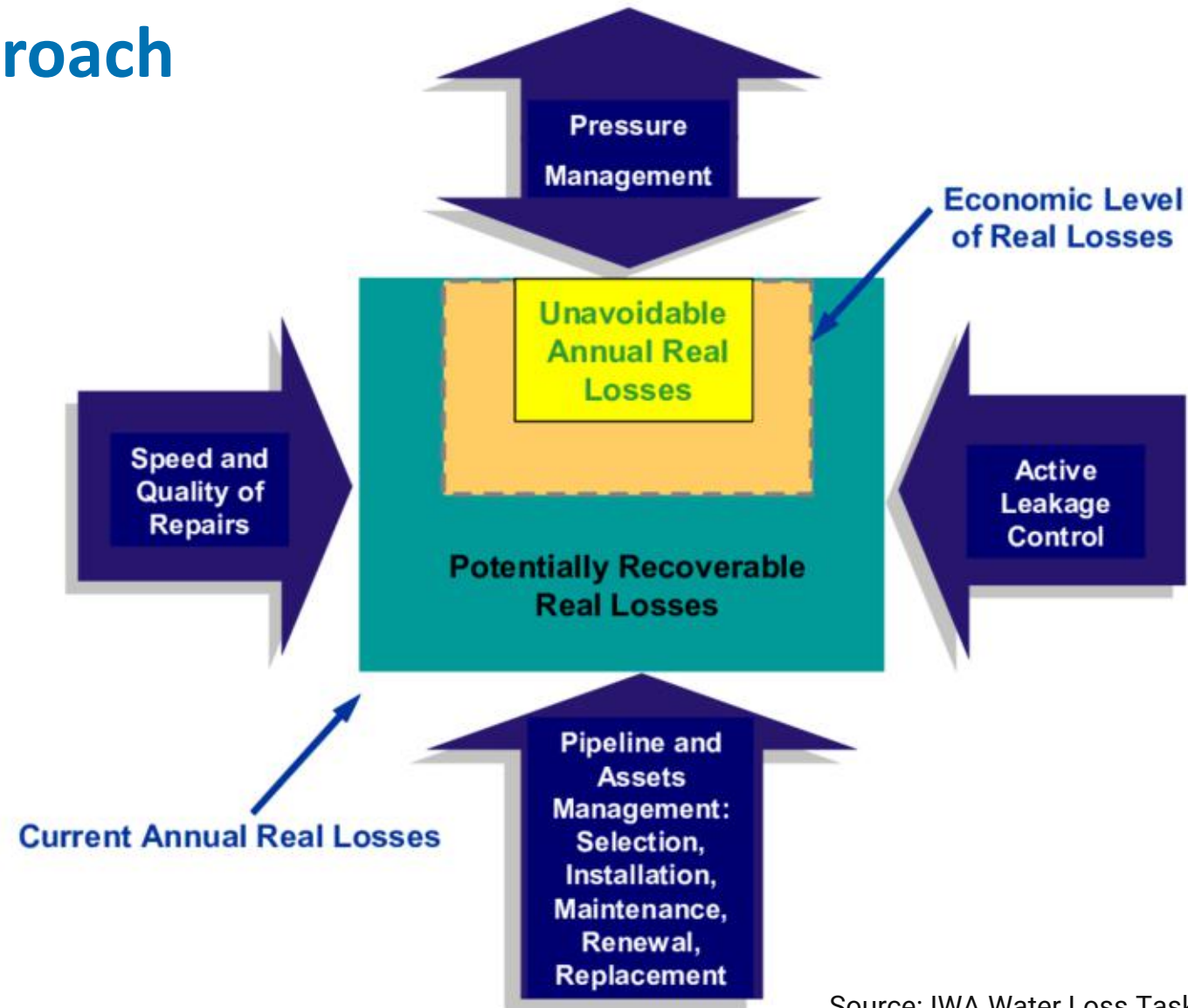


Bereid geweld te gebruiken
voor verdediging Taiwan



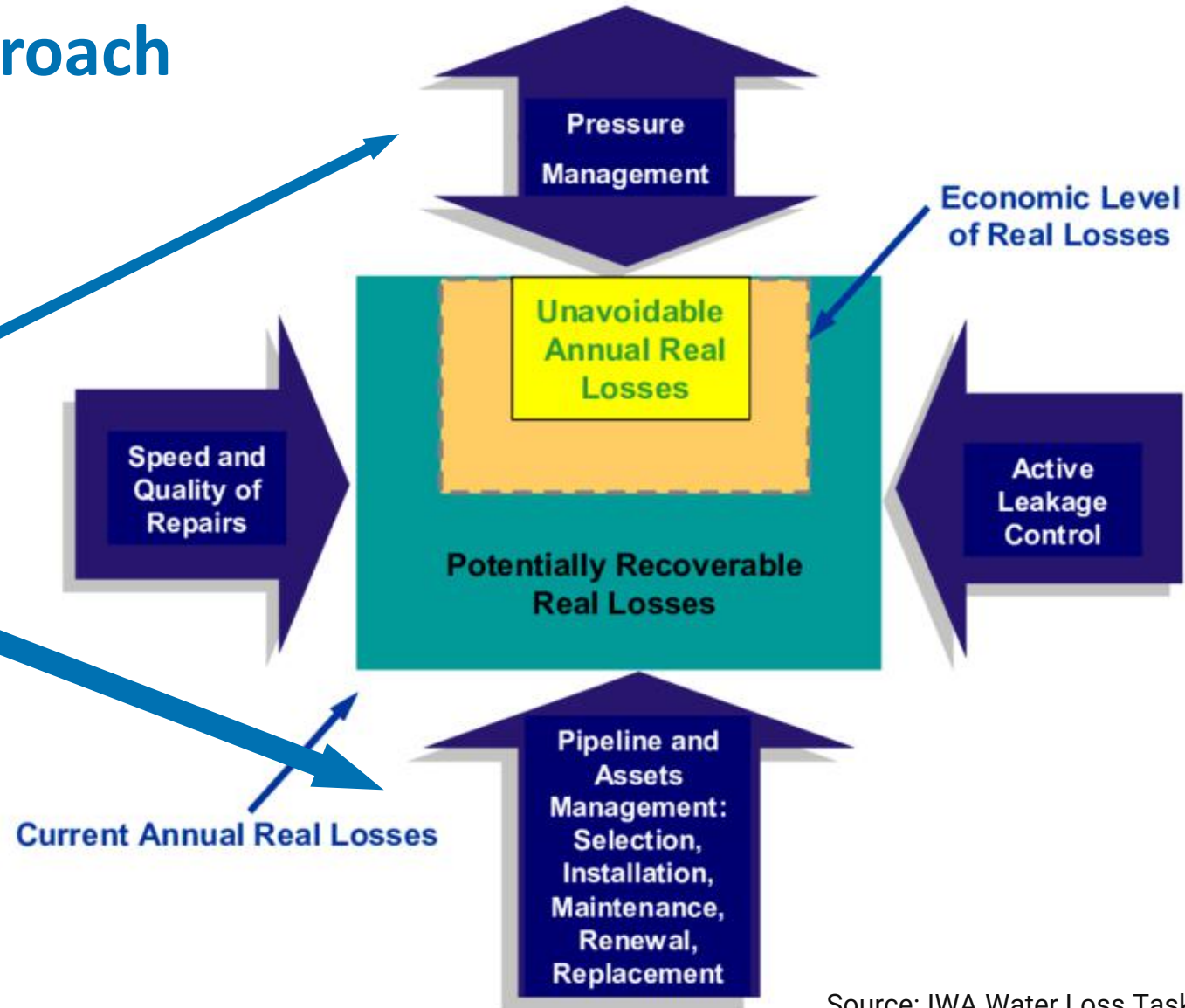
Vitens weigert aanvragen, 'zekerheid
drinkwater onder druk'

IWA's 4 pillar approach



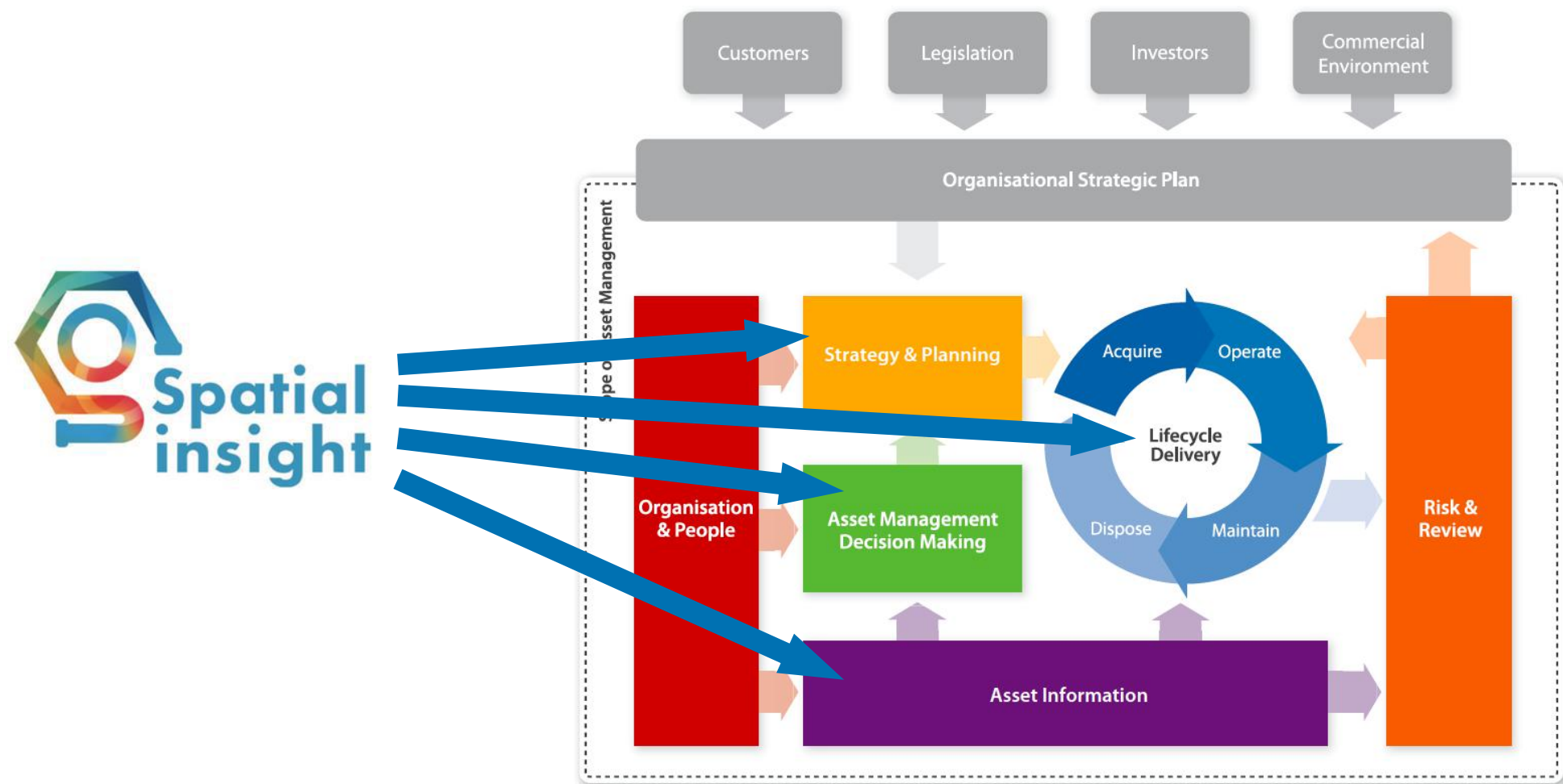
Source: IWA Water Loss Task Force

IWA's 4 pillar approach

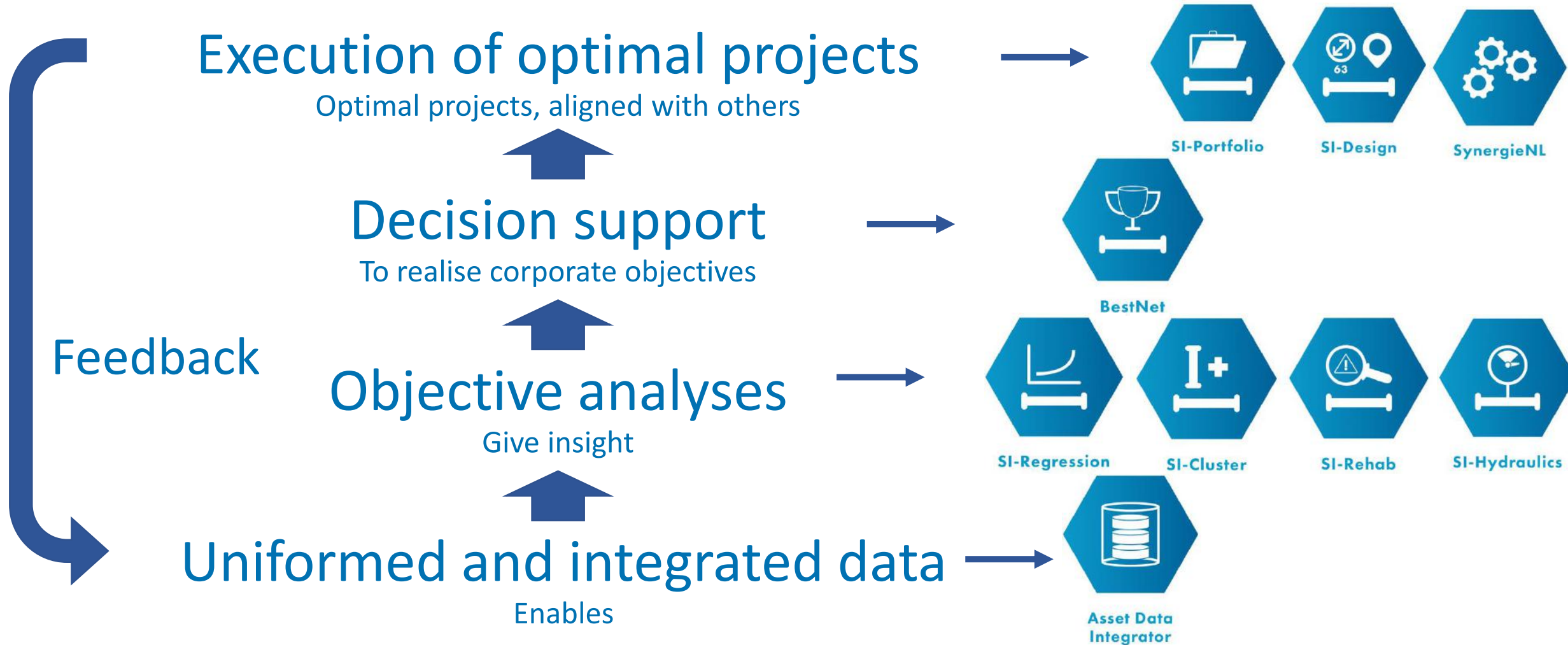


Source: IWA Water Loss Task Force

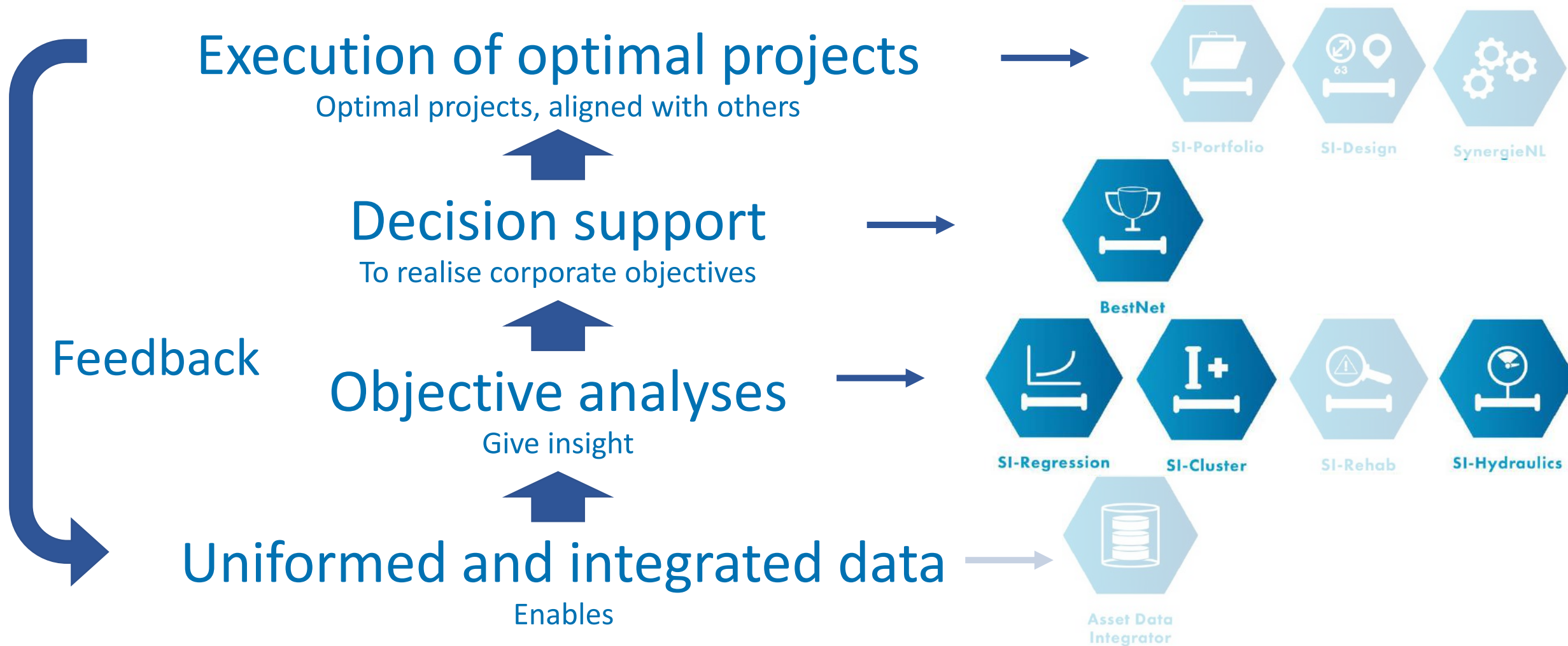
Accelerating within the ISO55001 framework



Spatial Insight's Asset Management software



Spatial Insight's Asset Management software



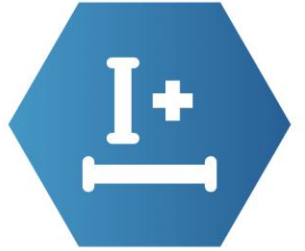


Results SI-Cluster for Bim GSP 2023

Two conclusions were drawn:

1. In 20.5 km (0.6%) of the network 9% of the leakages occur
2. In 175 km (5%) of the network 48% of the leakages occur

Upon GSP's request, Spatial Insight made recommendations for data quality improvement.

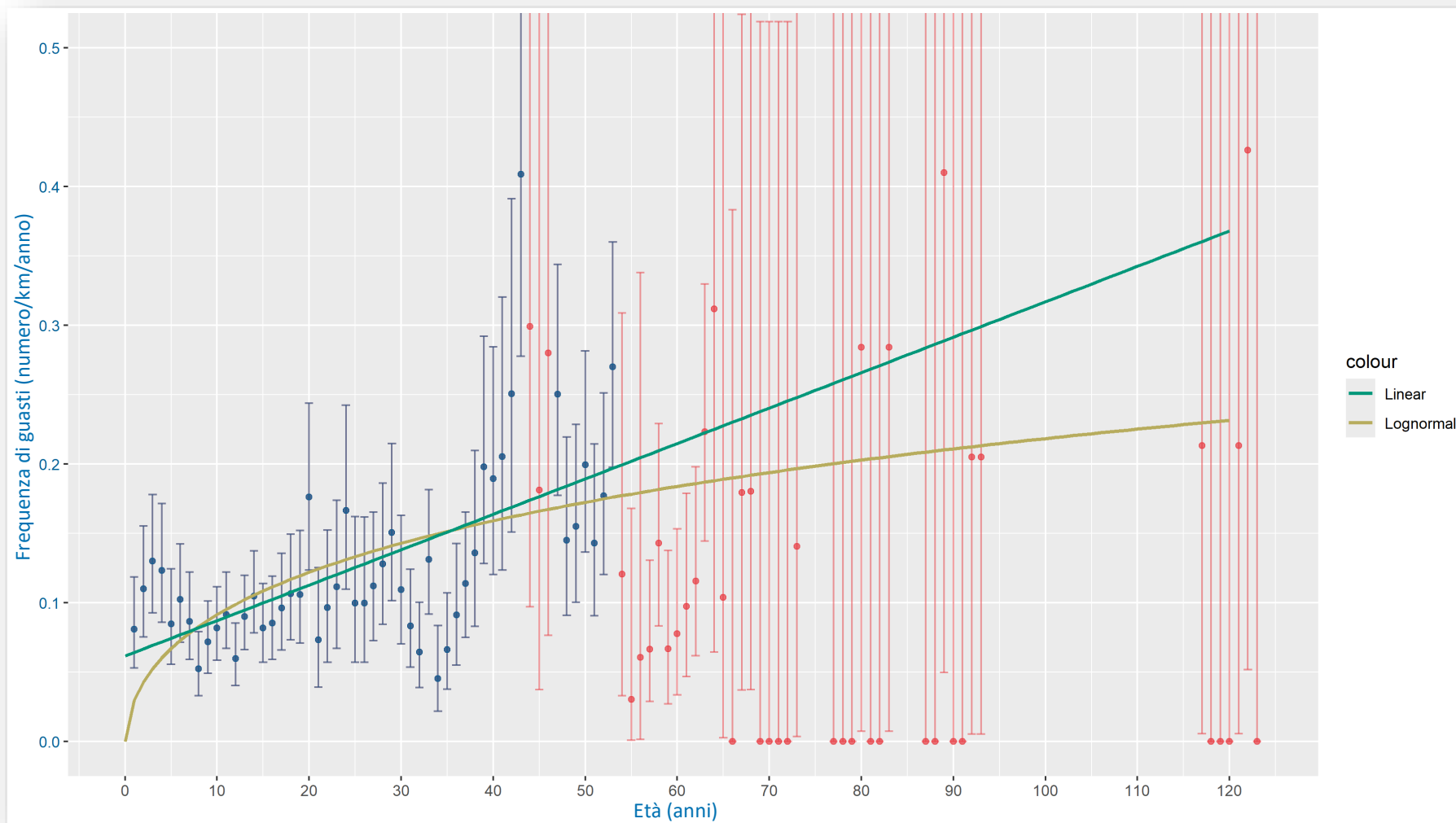


SI-Cluster

Results SI-Regression for Viva Servizi



SI-Regression





BestNet: connecting the asset owner and asset manager



BestNet



So....

People and politicians are more and more demanding and ask for non-revenue-water reduction.

Asset management and pressure reduction are effective and efficient ways to do so and require little investments to have impact.

I'm looking forward to joining forces between Italy and The Netherlands.



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