

Paris Session 2022



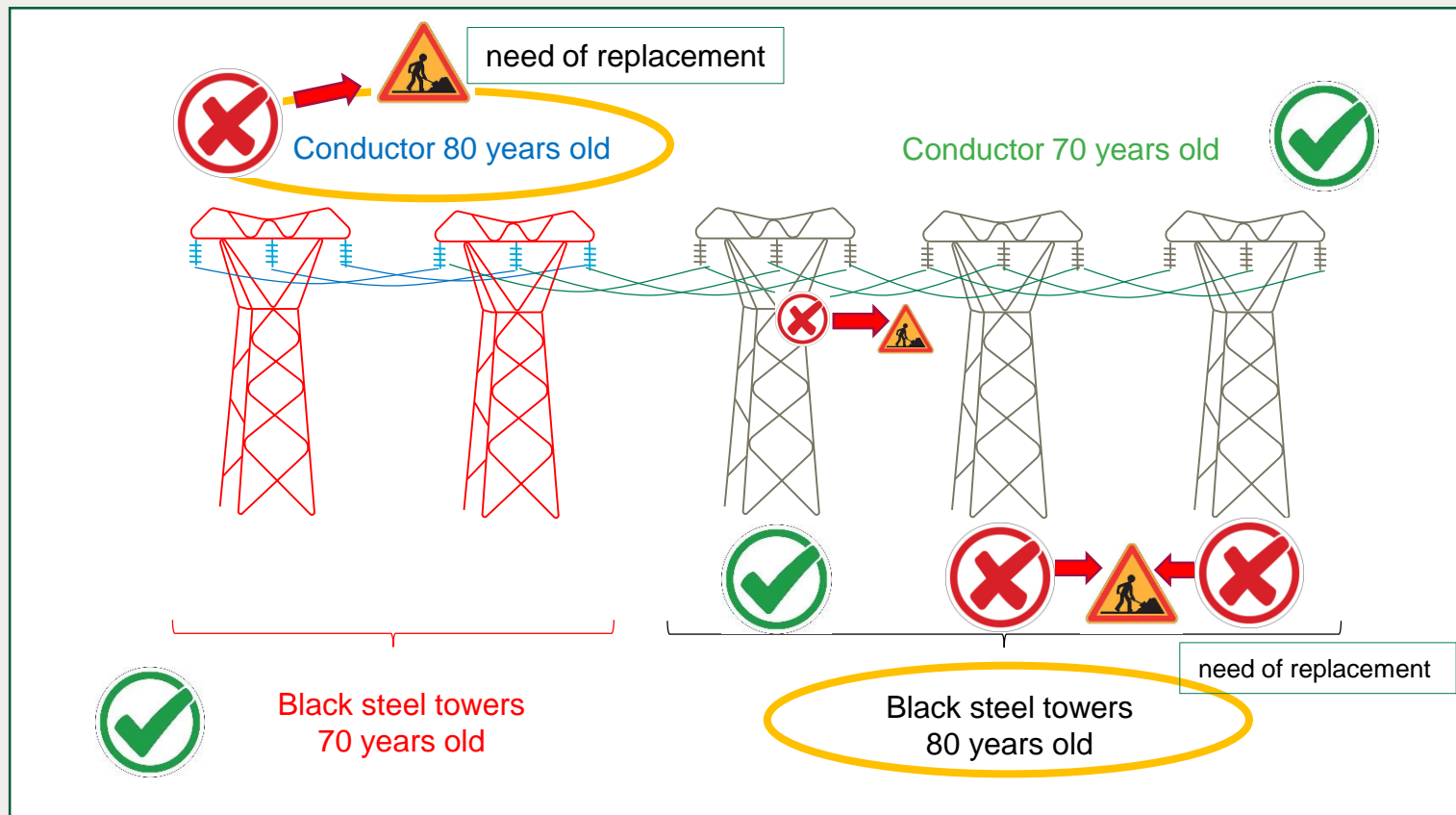
Towers & Conductors works synchronization

SC B2 – Pref. subject PS3 – Question 3.13
Nicolas Raux, France



Asset management: A regular questioning

Historical strategy: the local optimum

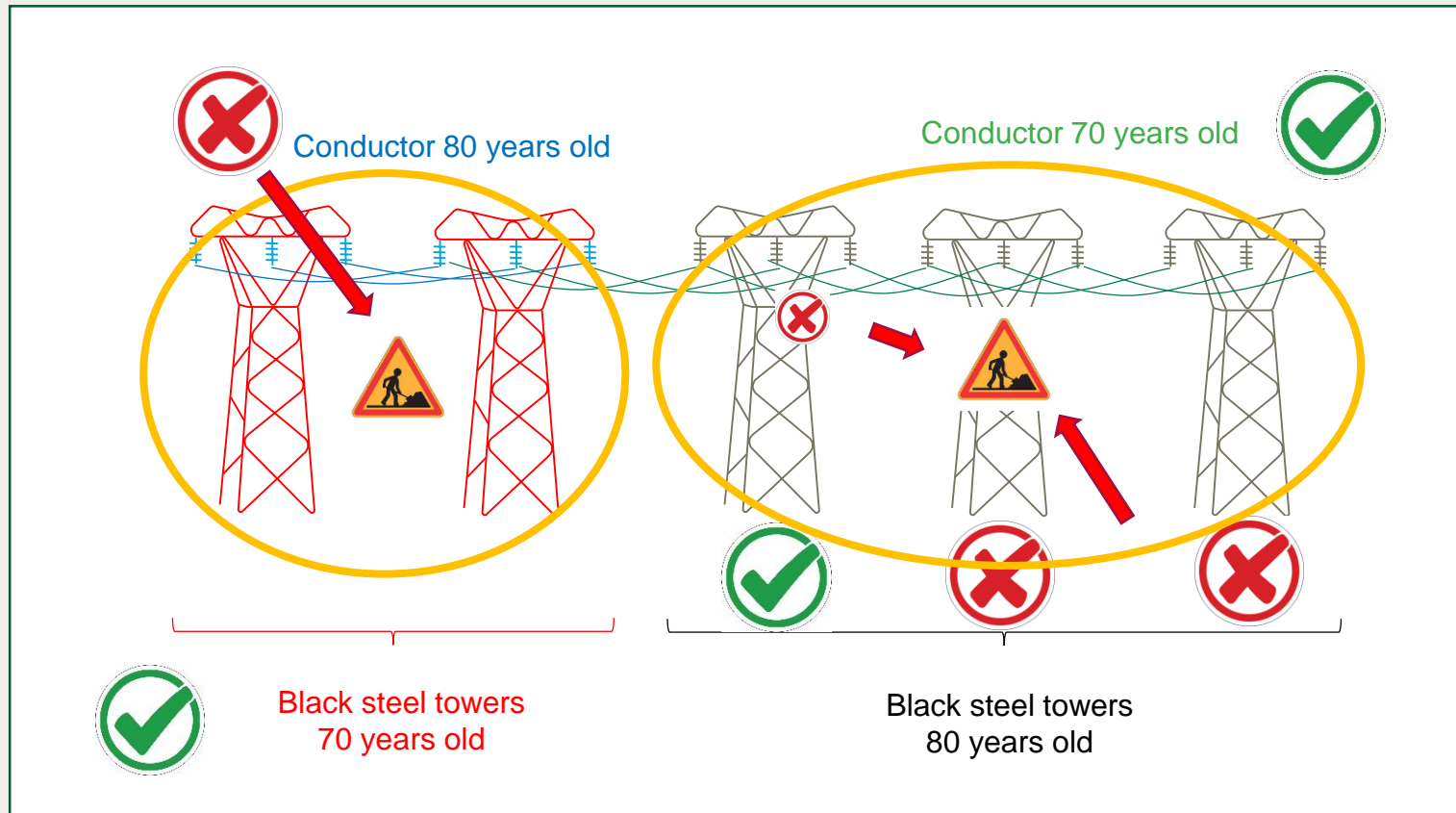


- Limit the replacement of each asset
- Consider the smallest works possible
- Pushing back lifespans
- Limit the impact on the power lines

But the line belongs to a global network → need for a global vision to reach asset management objectives

Asset management: always questioning it

Strategy studied: synchronization



Work synchronization hypotheses:

- In case of replacement of the conductor all the towers of the same age or older will be replaced
- In case of replacement of the towers if the conductor has the same age it will be replaced also

- ➔ Less heterogeneity on the network
- ➔ Anticipate large renewal volumes

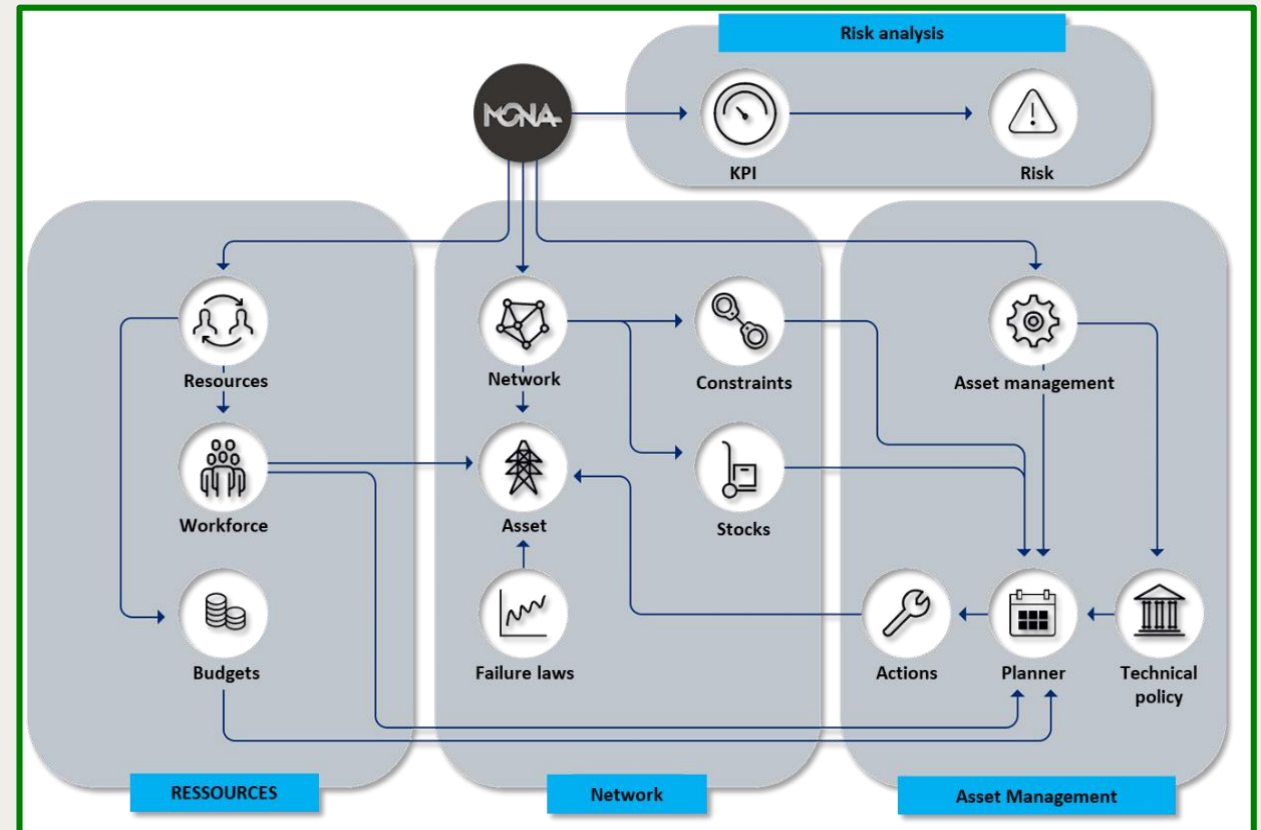
How to compare strategies between local optimization and synchronisation ?

Technical-eco study: digital twin, transition to global mesh

Consideration of a maximum of parameters:

- environmental impact
- human resources,
- number of operation,
- third parties impact,
- network congestion
- CAPEX / OPEX

➔ Simulations according to the chosen scenarios



Group Discussion Meeting

Develop our asset management policies

Synchronization gains



Group Discussion Meeting

Work synchronization brings maximum gains:

- Lower carbon footprint impact,
- Reduce environment impact,
- Facilitate inspection,
- Reduce works cost: some interventions can be grouped (facilities, removal...),
- Decrease the number of intervention,
- Increase economies of scale,
- Reduce fixed costs,
- Reduce Maintenance costs,
- Allow standardization.