



مؤتمر ومعرض كهرباء الخليج 2017
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Strategic Asset Management Implementation (SAMI)

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Introduction and Agenda



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**Special Appreciation to
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Project Manager SAMI
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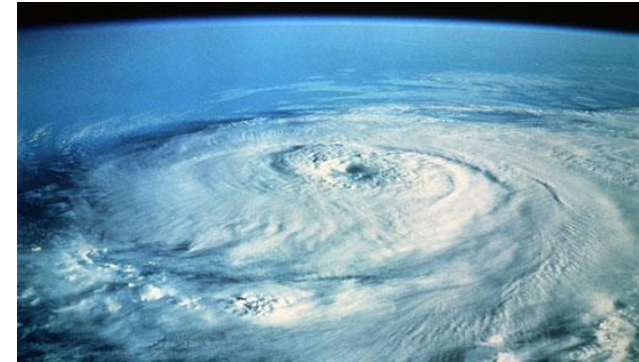
Agenda

1. The Perfect Storm
2. What prevents you to be prepared
3. How National Grid SA prepares for the storm
4. You too gear up...
5. How Asset Performance Analysis contributes to preparing for the storm
6. How we prepared National Grid SA's APA

The perfect storm...

TSO around the world, including National Grid SA face the concomitant occurrence of the following phenomena :

- Regulatory requirements
- Increasing demand for power
- Ageing and diversity of assets
- Increasing technological complexity
- Increasing number and complexity of data
- Difficulties to attract and retain expertise
- Higher Capital and Operational Expenditure constraints
- Emergence of other generation and load systems (renewables, smart grid, etc.)
- Enhancing the safety and health of stakeholders

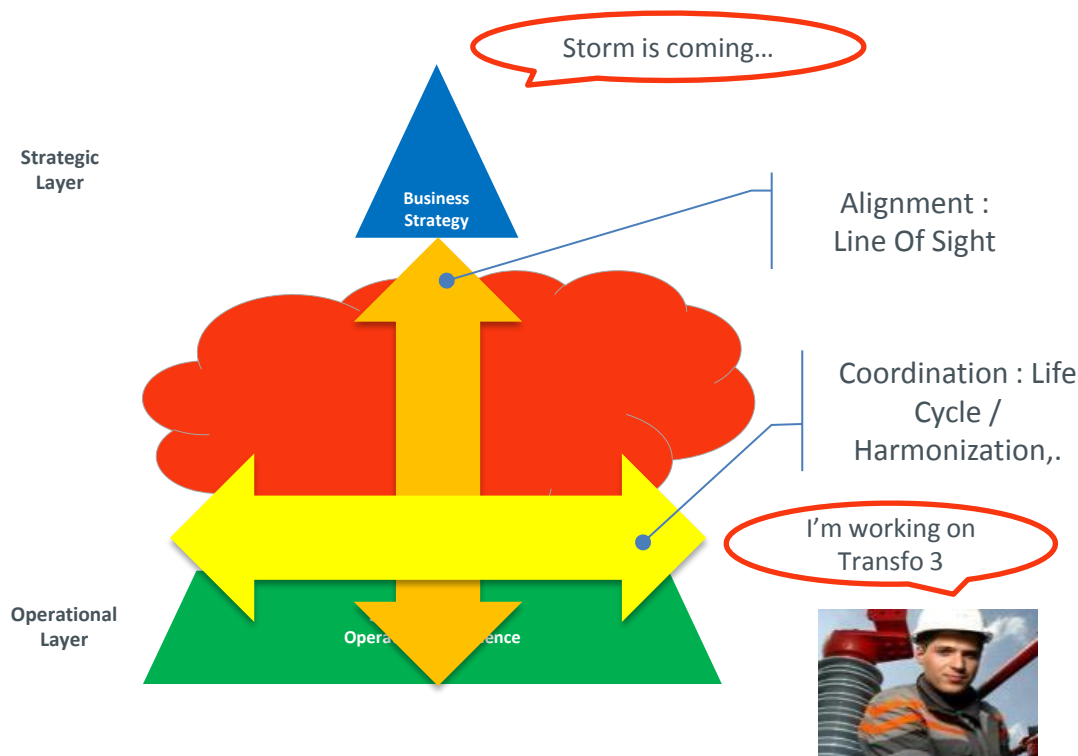


How do you cope with this storm?





What prevents utilities to be prepared for the storm...



All TSOs have a vision, values and mission statements (see websites, annual reports,...).

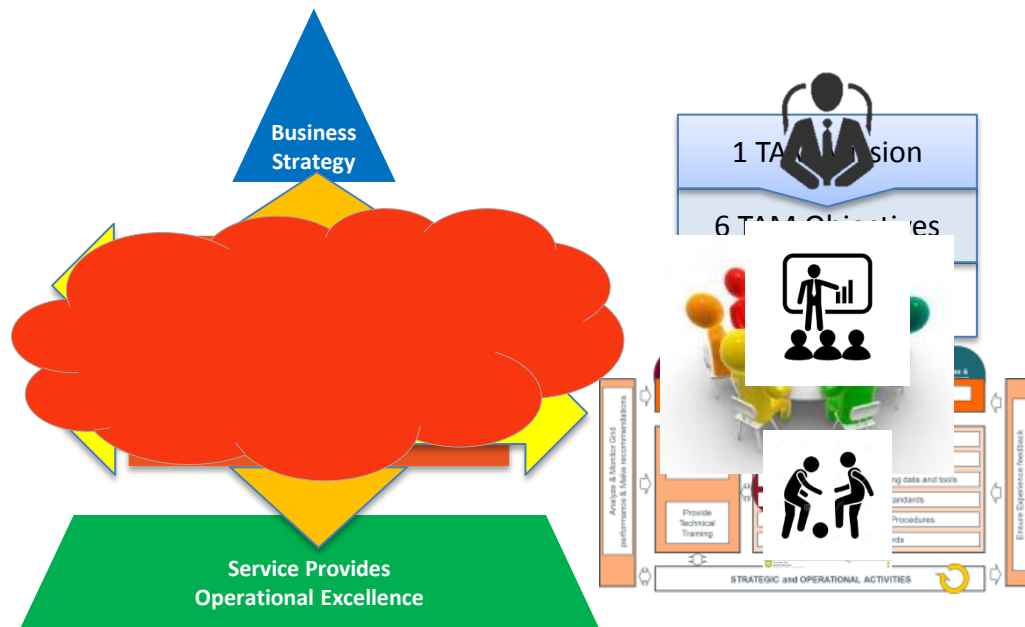
Strategic Layer - Long Term View

Very Few TSOs have implemented an efficient **"Tactical Layer"**

All TSOs have Operators (internal or external) to operate their grids (maintenance, projects,...)

Operational Layer - Short Term View

How National Grid SA prepares for the storm



A Tactical Layer with :

Clear Roles & Responsibilities

Clear Mission & Operating Model

Connected through Governance Bodies

State-of-the-art organization

AM Core processes

You too gear up...



Structure



The program



**Competent
Staff**



**Life Cycle
Strategies**



**Experience
Feedback**



**Performance
Analysis**



**Asset Risk
Management**



**Technical
governance**



**Data & Tools
management**

Asset Performance Analysis contributes to Asset Management objectives and prepares for the upcoming challenges



Performance Analysis

Am I prepared for the challenges?

Is my grid resistant to the upcoming challenges?

What is the condition of my assets? Need to act before the occurrence of issues?

Are data related to my system condition acquired with sufficient quality ?

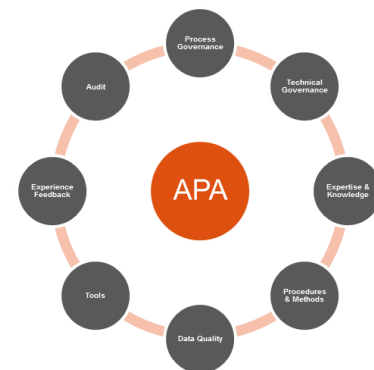
Is my staff capable of understanding and finding solutions for all events?

Experience feedback processes to understand what happens on the field?

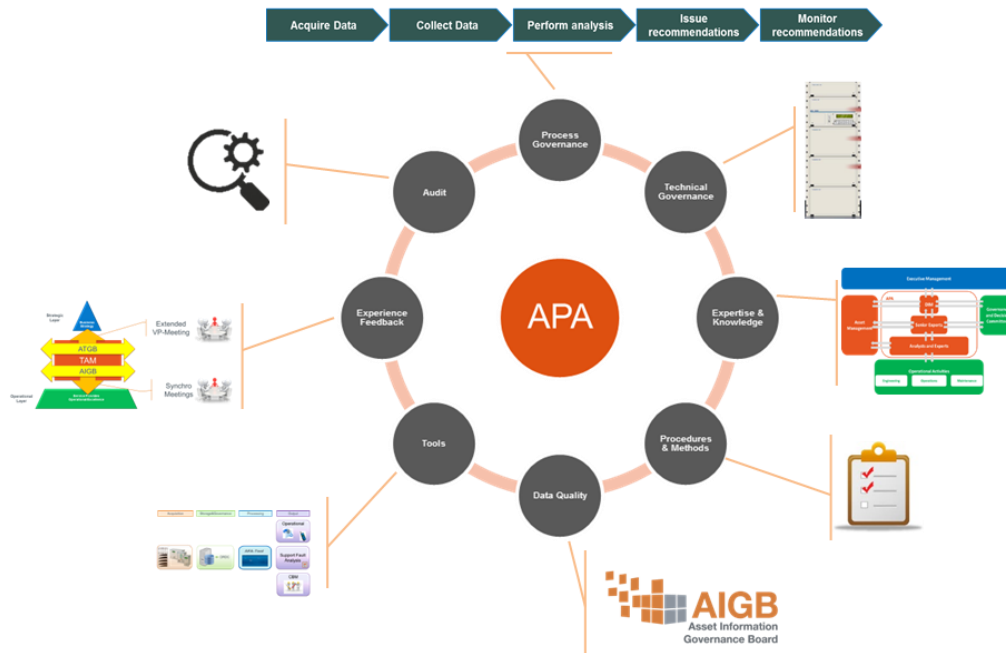
Are my field staff trained to follow procedures in case of events?

Do I check if the performance analysis is running smoothly?

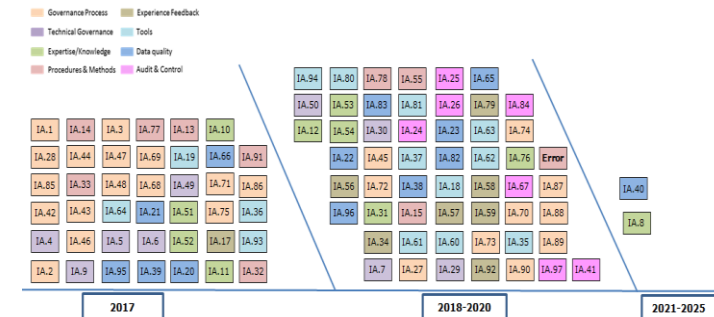
Do I have sufficient tools to receive the acquired asset performance data ?



How we prepared National Grid SA's Asset Performance Analysis activities



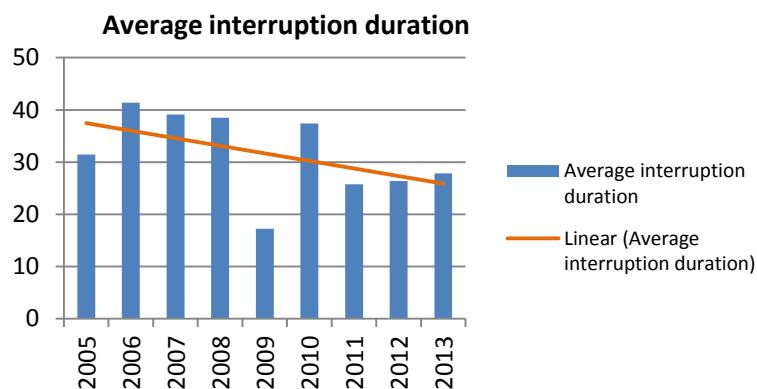
Developing the Asset Performance Analysis framework for National Grid SA and showing the added value of the activities...



...leading to a roadmap to continue in the right direction for the upcoming 10 years

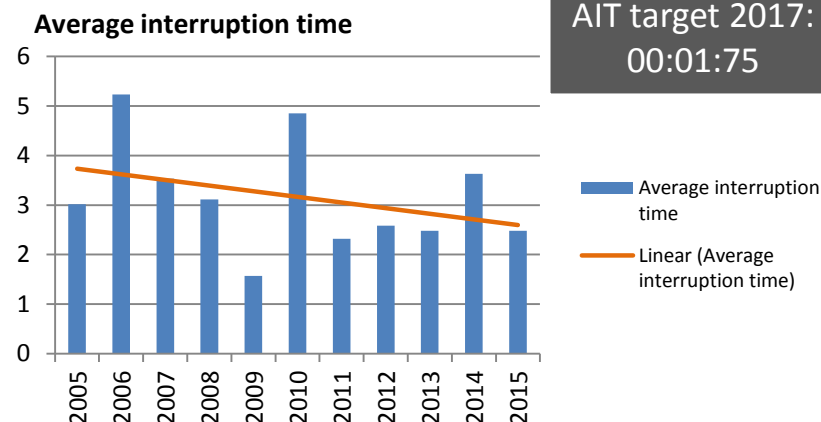
With clear benefits!

Average Interruption Duration in minutes (SAIDI)



From around 37 minutes to 27 minutes in less than 10 years

Average interruption time in minutes (AIT)



AIT target 2017:
00:01:75

These are the results that Elia could harvest by implementing the solution and roadmap deployed at National Grid SA



Questions?

Please do not hesitate contacting us:



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