

Rotor life assessment and extension					
WG Name	LTA/LTE	Chair	Siavash Pahlavanyali (RINA Tech)	Co-chair	Luc Gooren (Engie)
Project lead	Siavash Pahlavanyali (RINA Tech UK)				
Core team	Luc Gooren (Engie); Lulian Papuc (Total); Luca Forno (EthosEnergy); Rene Vijgen (ETN); Siavash Pahlavanyali (RINA Tech UK)				
ETN officer	Nicolo Cairo				
Initiative description					
Scope definition					
<ul style="list-style-type: none"> - This paper summarizes the state of the art of gas turbine rotor lifetime assessment and potential service extension. It was initiated by the ETN gas turbine users that noted the need for extension of these assets in the given technical environment - The paper describes the rotor lifetime assessment process, the available practices for the land based and aero engines, identifies gaps and provides recommendations for future work. 					
Objective setting					
<ul style="list-style-type: none"> - To understand the damage mechanisms compromising gas turbine rotor integrity - To develop a generic rotor lifing approach as a platform to extend the rotor life - To increase the knowledge base of our association and members and initiate new projects to develop the analyses and techniques in more detail 					
Expected outcome					
<ul style="list-style-type: none"> - To issue a guideline document on rotor lifing - To reliably extend the rotor life of the turbine - To improve the owner/operator (including the service providers and OEMs) awarnaces on the issues affecting the rotor life to to reduce the risk of an uncontained catastrophic failure of the unit - To identify weaknesses within the processes (including the inspections) and initiate improvements 					
Implementation of the activities					
Project execution					
Please describe the role and the involvement of the participating members.					
<ul style="list-style-type: none"> - To structure the framework: a core team is formed - To execute the work for various tasks: Participation by various experts from the plant owners, academia, research centres and service providers (including OEMs) 					
Project finances					
<ul style="list-style-type: none"> - No external funding required - Associated costs absorbed by participating members - ETN to cover the report costs 					
Meeting schedule and dissemination					
<ul style="list-style-type: none"> - Presentation at IGTC 23 - Publishing final report in physical form and on the website - Various updates in ETN MNL and QNL 					
Deliverables & Milestones					
Deliverable 1	Presentation at the IGTC			Timing	10-2023
At the IGTC the results to date will be presented					
Deliverable 2	Final ETN report			Timing	02-/2024
Provide an ETN report that describes the scope					
Milestone 1	Project start			Start date	07-2023
Explain briefly. In progress					
Milestone 2	Project end			End date	02-2024
Explain briefly.					