

Weekly Report – Loads and Dynamics Team

Team Leader: Mohamed Reda Alywa

Week Number: [Week 2, 28 July to 02 Aug 2025]

1. Summary of Progress This Week

- Studied Chapter 4 of the DNVGL-ST-0437 standard.
 - Began studying the GL-Guidelines (2010). The document is highly relevant to the current phase, but a full study will require additional time to complete.
 - Searched the ASHRAE Meteo database for environmental data, but found that the dataset was last updated in 2021 and that some values appear outdated or inconsistent. Relying on this data may compromise the accuracy of our simulation results.
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2. Milestone/Deadline Status

- Current Phase: Concept Phase
 - On Track?: Yes
 - Notes: N/A
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3. Next Week's Plan

- Continue studying the GL-Guidelines (2010) in more detail and aim to finalize the study.
 - If the review is completed, begin analyzing the attached datasheets and extreme load results from ~600 commercial wind turbines to extract load characteristics relevant to OPTIMUS Syria.
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4. Request to Head of Project

- Are there any updates regarding the wind turbine site or environmental conditions?
- We need confirmation of the rated power and rotor diameter of the turbine
- No technical issues reported at the moment.
- No additional software or licenses required at this stage.