### 📄 ****Weekly Progress Report – Grid Code Development Sub-Team****

**Project Name:** Optimus Syria **Sub-Team:** Grid Code Development **Team Leader:** Marcus Attalla **Reporting Period:** 22–27 July 2025

#### ✅ **Summary of Progress**

During this reporting period, the team leader worked independently and accomplished the following:

1. **Technical Documentation:**
   * Structured and completed chapters covering voltage, frequency, reactive power, FRT, and harmonics.
   * Prepared academic-style writing with proper referencing for the project report.
2. **Turbine Selection:**
   * Chose SG 3.4-132 (DFIG) model for simulation purposes.
   * Collected and reviewed datasheets to support simulation setup.
3. **Simulation Preparation:**
   * Initiated the simulation phase with block selection and schematic layout.
   * Assembled core blocks: Wind Turbine (DFIG Phasor Type), Signal Builder, PI Controller, Fault Logic, Voltage Measurements, Excitation System, Crowbar logic.
   * Simulation is still in its early setup phase — wiring and testing will follow in the coming week.

#### ⚙️ **Current Status**

* Simulation framework is in development (not yet running).
* Reactive control logic and crowbar protection blocks have been drafted.
* Documentation is ahead of schedule and aligned with project milestones.

#### 📌 **Next Steps**

* Complete wiring in Simulink and begin functional testing.
* Generate reactive current and voltage plots under fault scenarios.
* Draft Chapter 5: Grid Integration Guidelines and finalize checklist.

#### 🚫 **Team Contribution Status**

* No input or deliverables were received from other team members during this reporting period.
* All tasks completed were handled independently by the team leader.