



INSTITUTO SUPERIOR TÉCNICO

INFORMATION SYSTEMS AND DATABASES

Project

Part 1

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E-A Model

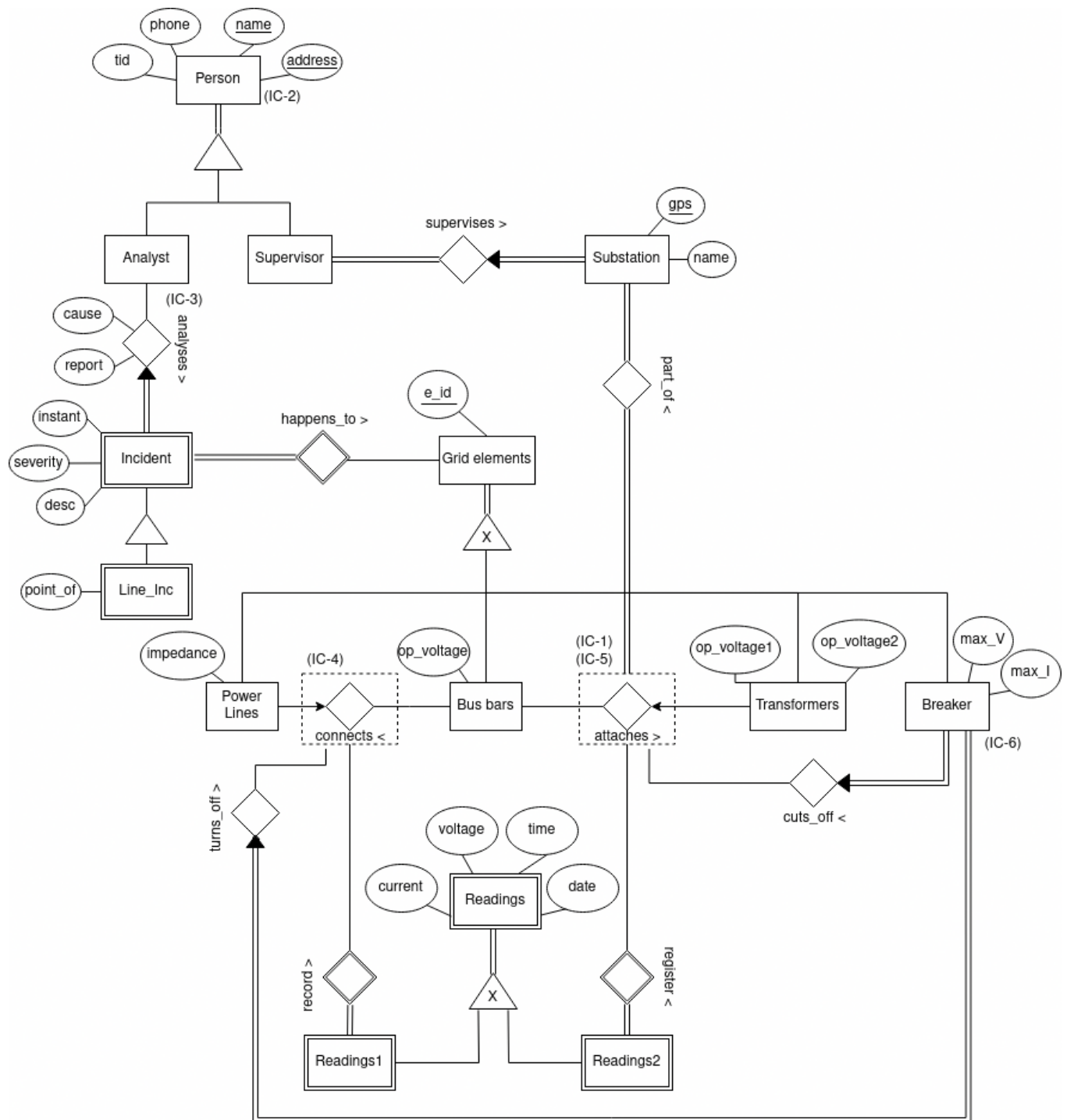


Figure 1: E-A diagram

Integrity Constraints

- (IC-1) The **operating voltages** of the bus bars must match the ones of the **transformer** terminals they are connected to
- (IC-2) Phone and tax id numbers must be unique
- (IC-3) Analysts can only **analyse** incidents that do not **occur** in a substation they supervise
- (IC-4) Each power line must **connect** exactly two different bus bars
- (IC-5) Each transformer must **be connected** by exactly two different bus bars
- (IC-6) A breaker of a given id **can only be connected** to exactly two **linked** power grids elements at a time