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graph LR; subgraph Causes; IP[Industrial Processes]; TI[Transmission Issues]; SA[Sensor Architecture]; end; subgraph Irregularity; TD[TIME DELAY]; end; subgraph Types_and_Effects [Types and Effects]; CKD[Constant and Known delays]; NCD[Not Constant]; RUD[Random and Unknown Delays]; MFD[Multiple of fixed value]; OOSM[Out Of Sequence Measurements]; KMD[Unknown Multiples of a Base Delay]; BA[Burst Arrivals]; SLOOSM[Single-lag OOSM]; MLOOSM[Multiple-lag OOSM]; MLOOSM2[Mixed-lag OOSM]; end; IP --> TD; TI --> TD; SA --> TD; TD --> CKD; TD --> NCD; NCD --> RUD; NCD --> MFD; NCD --> OOSM; RUD --> KMD; RUD --> BA; OOSM --> SLOOSM; OOSM --> MLOOSM; OOSM --> MLOOSM2;
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The diagram is organized into three main vertical sections: **Causes**, **Irregularity**, and **Types and Effects**.

- Causes:** Three orange boxes represent the sources of delay: **Industrial Processes**, **Transmission Issues**, and **Sensor Architecture**. Arrows from these boxes point to a central red box in the **Irregularity** section labeled **TIME DELAY**.
- Irregularity:** The **TIME DELAY** box branches into two paths:
 - Constant and Known delays:** A dark blue wavy box.
 - Not Constant:** A teal rectangular box.
- Types and Effects:** The **Not Constant** box further branches into three categories, each with its own set of effects:
 - Random and Unknown Delays:** A dark blue wavy box. It leads to two effects: **Unknown Multiples of a Base Delay** and **Burst Arrivals** (both in dark blue wavy boxes).
 - Multiple of fixed value:** A teal rectangular box. It leads to **Burst Arrivals** (dark blue wavy box).
 - Out Of Sequence Measurements:** A teal rectangular box. It leads to three effects: **Single-lag OOSM**, **Multiple-lag OOSM**, and **Mixed-lag OOSM** (all in dark blue wavy boxes).

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The diagram illustrates the causes, types, and effects of time delays in sensor networks. It is organized into three main sections: Causes, Irregularity, and Types and Effects.

Causes: Three orange boxes represent the causes of time delay: Industrial Processes, Transmission Issues, and Sensor Architecture. Arrows from these boxes point to a central red box labeled **TIME DELAY**.

Irregularity: The **TIME DELAY** box branches into two categories: **Constant and Known delays** (dark blue wavy box) and **Not Constant** (teal rectangle).

Types and Effects: The **Not Constant** category further branches into three types of delays: **Random and Unknown Delays** (dark blue wavy box), **Multiple of fixed value** (teal rectangle), and **Out Of Sequence Measurements** (teal rectangle). These types lead to various effects: **Random and Unknown Delays** leads to **Unknown Multiples of a Base Delay** (dark blue wavy box); **Multiple of fixed value** leads to **Burst Arrivals** (dark blue wavy box); and **Out Of Sequence Measurements** leads to three types of Out Of Sequence Measurements (OOSM): **Single-lag OOSM**, **Multiple-lag OOSM**, and **Mixed-lag OOSM** (all in dark blue wavy boxes).

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