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| **Assumption** | **Description** |
| Network availability | We assume that we have network coverage across the monitored areas. |
| Microcontrollers | We assume that we can use a microcontrollers to manage each sensor and each actuator. |

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| **Risk** | **Date the risk is identified** | **Date the risk is resolved** | **Explanation on how the risk has been managed** |
| Critical messages delivery times  (in case of disaster) | 13/11/2017 | 20/11/2017 | We plan on deploying redundant servers (located in a different geographic zone, which host the application) that will go online in case of active server’s failures. |
| Big data storage | 13/11/2017 | 17/11/2017 | We plan on using a dedicated NoSQL database to handle that amount of data. |
| Sensors failures | 13/11/2017 | 24/11/2017 | We plan on using redundancy of sensors, which will start working in case of failure (of the active sensors). |
| Learning of the Kafka framework | 13/11/2017 | 15/12/2017 | We plan on using Kafka framework to develop the system: we discovered that it is quite simple to learn and use, even if to exploit its advanced features we had to go deeper into the documentation. |
| Multi-database integration | 20/11/2017 | 28//11/2017 | We plan on using 2 databases at the same time in order to store data: the relational one will store structural information and the NoSQL will store raw data (as the two are not communicating and they contain different kind of data we do not have synchronization problems). |
| Hardware Management | 4/01/2018 | - | (se l’hardware si adatta, se c’è corrente...etc) |