



**Author:** K. Tsatsakis, Suite5

Comfort and convenience are two of the most important factors that contribute to our overall well-being in buildings. Whether it's our homes, offices, or public spaces, the indoor environment can greatly impact our health, productivity, and happiness. Its criticality in the building environment is highlighted also in the Smart Readiness Indicator (SRI) framework as the methodological framework that provides a comprehensive evaluation of a building's energy performance, highlighting its strengths and weaknesses. The goal of SRI is to help building owners and managers to identify opportunities for improving energy efficiency but also comfort, and convenience promoting the establishment of a more comfortable, healthy and convenient indoor environment for occupants.

In alignment with SRI framework specifications, we are delivering in PHOENIX project a **building comfort and convenience ICT application** on the way to improve people's daily lives. The aim of this application is to provide a DSS system that correlates building contextual conditions along with the extracted comfort profiles and user settings in order to generate the relevant comfort and convenience related notifications associated with the indoor conditions in premises. More specifically, a rule-based engine has been implemented that take into account dynamic and static configuration parameters in order to trigger the relevant recommendations to the users. Complementary to the notification engine, and in case building automation systems are available, the overall solution can be adapted in order to automatize the operation of controllable devices (focus on HVAC, lights etc.) on the way to ensure the establishment of a comfortable, healthy and well-conditioned environment.

As technology continues to advance and play an increasingly important role in our lives, it's crucial to ensure a high level of readiness and effectiveness of the PHOENIX comfort and convenience application and towards this direction some key factors and innovative elements that characterize the application are presented in brief:

- **User-centered Design:** The application should be designed with the user in mind. This includes considering the user's needs, preferences, and behaviour when designing the functionalities and the features of the respective engine.
- **Accessibility:** The application should be accessible to as many people as possible, including those with disabilities or elderly people. This may involve adding features and parameters that will ensure the active enrolment of different user groups in the evaluation process.
- **Integration:** The application should be able to integrate with other existing tools and systems that the user may already be using. This makes it easier for the user to adopt the application and avoid having to switch between multiple tools.
- **Reliability:** The application should be reliable and provide consistent performance. This includes ensuring that the application is regularly updated with bug fixes and new features.
- **Security:** The application should be secure and protect the user's data. This may involve using encryption, secure authentication, and regular security updates.
- **User Feedback:** The application should incorporate feedback from users to make improvements and ensure that it continues to meet their needs.

Overall, by considering at the design phase key factors such as user-friendliness, interoperability, customization, and accessibility, we aim to improve the user experience and ensure a high assessment level at promoting comfort and convenience in buildings.

