

numerous possibilities. It forms an integral part of sustainable development of underground space. It is vital for an urban underground future.

5. CONCLUSIONS

The use of underground space can come about by sheer necessity to free up surface space. It can happen through public or private initiative. Whatever the reason for its development, in itself its use does not lead to sustainable development of underground space.

A framework is needed to ensure the sustainable development of underground space. The authors have shown that this framework requires the development of a vision & strategy, planning and management.

The authors also emphasize that development in the context of this framework can only happen through dialogue with all stakeholders involved. Without planners and engineers sharing information in the early stages of underground development chances are that autonomous development will cause serious impediments to future development and use.

The authors see a clear need for the effective and long-term use of underground space in making our cities more resilient, more liveable and more sustainable.

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