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Project Topic:

Blockchain based Information Sharing platform for Hong Kong underground utilities

Abstract:

The Hong Kong Underground Utilities is currently central managed by Highway Department. But, behind the scenes, the effort is contributed by different government departments such as Drainage Services Department, Lands Department and Electrical Mechanical Services Department. The reason is that the data used for the management of underground utilities are owned by different government departments, it causes some management process such as excavation permit application process suffered from below:

1. Long Application Processing Time
2. Data Silos between different government departments
3. Hard to track application progress
4. High Operating Cost

In such as case, the use of Blockchain DLT could potentially provide efficient and transparent management of underground utilities information sharing:

1. Executed in real time, eliminating the role of HK Highway Department and Main Contractor role to reduce transaction cost and length of processing period by quality information sharing.
2. Available of distributed ledger, thereby increasing the quality and authenticity of underground utilities as built drawings – 3D spatial data
3. The identities of Public Utilities Company, Main Contractor, Subcontractor, Quantity Surveyor and different Government Departments are verified, thereby reducing the risk of fraud record.

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Additional Info:

See powerpoint slides



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