

Melbourne Metro Rail Project
Witness Statement of Simon Duck

Introduction

1. My name is Simon Duck of Level 31, 680 George Street, Sydney New South Wales 2000.
2. I have a Bachelor of Education (Environmental Science) and a Diploma in Management.
3. I am General Manager of IT Service Delivery for Tabcorp Holdings Limited (**Tabcorp**) and will have been working for Tabcorp for 20 years in January 2017.
4. My experience at Tabcorp operating the datacentres as well as managing the datacentre teams and technology operational teams provides me with the necessary background to make this statement in relation to the Melbourne Metro Rail Project (**the Project**).

Tabcorp's datacentre operations

5. Tabcorp's Victorian datacentre is located on Level 7, 5 Bowen Crescent, Melbourne, 3004 (**5BC**) and is manned 24 hours a day, 365 days a year by a dedicated team.
6. The datacentre at 5BC houses the key infrastructure for the Tabcorp businesses including:
 - (a) wagering and betting systems (incorporating both the pari-mutuel and fixed odds systems) for ACT, NSW and Victoria;
 - (b) Keno Victoria production systems;
 - (c) Trackside production systems nationally;
 - (d) disaster recovery systems for its Keno operations in NSW, Queensland and ACT;
 - (e) disaster recovery systems for its Sky Racing television operation in NSW which provides Sky Racing vision for three subscription television channels for 23 hours a day 365 days per year and vision of racing in TAB agencies and licensed venues nationally;
 - (f) disaster recovery for its Sky Sports Radio operation in NSW;
 - (g) disaster recovery for its Tabcorp Gaming Solutions (TGS) operation for TGS venues in Victoria and NSW; and
 - (h) key network devices and critical business systems that span across the entire Tabcorp business including Oracle, which manages all of the financial and staff management systems.
7. The datacentre at 5BC has a floor area of approximately 650 sqm and has a gas fire suppression system, multiple air conditioning units and backup diesel generators.

Risks associated with the Project

8. The Project presents the risk of interruption to power feeds or communication services into the building or surrounding streets/ blocks/precincts which would impair and or/adversely affect our critical hosts and ancillary system.

9. The size and the duration of the works involved with the Project means that the risks associated with the Project are significantly higher than the risks we normally encounter.
10. Furthermore, the Project will require underground works including drilling and tunnelling which is not a normal day to day occurrence. In the past, smaller building works have impacted on Tabcorp's business through for example, cut fibre lines. As the works associated with the Project are significantly larger, the risk of the works impacting on Tabcorp's business is higher.

Impact on Tabcorp's business

11. Over 600 technology staff depend on the datacentre to carry out their roles, making the datacentre a critical component of the Tabcorp network which provides the Tabcorp business with approximately 70% of its revenue.
12. The majority of communications in and out of 5BC are transported via a variety of data cables that terminate in the datacentre. These data cables are integral to Tabcorp's operations which connect to other production and disaster recovery sites, various call centres, international pooling partners and domestic racetracks (both metro and regional). Therefore any interruptions would impact Tabcorp's turnover and revenue.
13. Depending on the time of the year, day of the week, time of the day/night, any interruption to communications or power costs Tabcorp hundreds of thousands of dollars per hour.
14. In addition, any downtime of its system can cause damage to the Tabcorp brand and reputation.
15. Furthermore, a large proportion of Tabcorp's business is based on licences it obtains from the governments. As a result, Tabcorp has regulatory obligations in all the jurisdictions in which it operates and hold licences to provide every regulator with 24 hour access 365 days a year into some of its key hosts which are located in the datacentre of 5BC for the purposes of verifying integrity etc. Therefore the datacentre must be available and operational at all times without interruption. Any drop in these services may put Tabcorp's licences in jeopardy.

Current systems in place to deal with electricity/data cable fails

16. All infrastructure powered within the datacentre is supported by multiple Uninterruptible Power Supply (UPS) units of the following capacities:

	5BC
UPS A/B	220kW (110kW max each)
UPS C	175kW max
UPS D/E	150kW (75kW max each)
Generators	2 @ 1450kW max load

17. Appropriate policies, standards and procedures have been established which are maintained to enable computer systems to be shut down in a controlled and auditable manner without the loss of data, and must include provision should a UPS or stand-by generator fail. The UPS system provides twenty minutes of battery supplied power to essential operational equipment to ensure a controlled shutdown. The main host

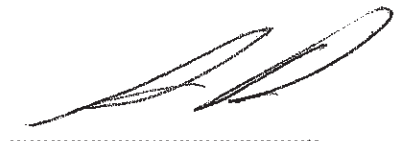
applications can be stopped within two minutes ensuring a clean stop to transactional databases etc.

18. The UPS/generators have been configured to ensure that there are multiple layers of power redundancy. This means that in the event of a disruption to the supply of mains power to all or part of the infrastructure, the failed component will not severely interfere with the operation of any other infrastructure.
19. The UPS and emergency services essential to the operation of Tabcorp's revenue generating businesses are tested every two months. The stand-by generators are tested every week without load and two full load tests carried on the building each year (before ARC and SRC).
20. From a data perspective, we rely on our telecommunications provider to manage the data cables and to the best of my knowledge, while there are certain levels of redundancy, this is not for every aspect of the network.
21. Tabcorp currently stores 80% of its data locally and 20% in the cloud. If the communications cable is cut, Tabcorp does not have an alternative back up because of the vast volume of data it uses.

Potential Risk Mitigation

22. The risks associated with the Project on Tabcorp could be mitigated by:
 - (a) giving Tabcorp sufficient notice of any planned works and, where the risks associated with these works are too high, veto of the works until suitable replacement data services are provided; and
 - (b) providing Tabcorp with redundant paths for incoming power and communication services to significantly lower the impact of any potential interruption to the power and communication services.

I have made all the inquiries that I believe are desirable and appropriate and no matters of significance which I regard as relevant have to my knowledge been withheld from the Committee.



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Simon Duck

12 / 8 / 16