VPN PERFORMANCE ANALYSIS

Conducted on: 4th July 2025

Test Parameters

- **VPN Service:** Proton VPN (Free Tier)
- **Test Location:** Netherlands Server
- **Testing Tools:** Ookla SpeedTest, DNSLeakTest

Speed Test Results

Metric	Without VPN	With VPN	Difference
Download (Mbps)	30.10	21.50	▼ 28.6%
Upload (Mbps)	30.77	29.71	▼ 3.4%

Security Assessment

✓ DNS Leak Test: **No leaks detected**

✓ IP Masking: **Successful** (Original IP hidden)

✓ Encryption: **AES-256 confirmed**

> **Notable Limitations**
>
> - Significant download speed reduction (28.6%)
> - Limited server selection on free plan
> - 10GB monthly data cap

Work Performed

1. Established baseline network speeds without VPN
2. Connected to ProtonVPN Netherlands server
3. Conducted multiple speed tests under both conditions
4. Verified DNS/IP leak protection
5. Analyzed encryption effectiveness
6. Documented all findings