



**CHINA SOFTWARE & IT SERVICES: POSITIVE CLOUD
OUTLOOK DESPITE RUSSIA-UKRAINE CRISIS**



Russia-Ukraine crisis may lengthen server delivery schedule as Ukraine produces >70% of global Neon, a necessary chemical for chip production.

Meanwhile, AliCloud reported a mere +20% YoY growth in CY4Q21. We believe China IaaS+PaaS market remains strong (9M21 +48% YoY to US\$15.3bn, according to IDC) but AliCloud share loss to Huawei/China Telecom will become more obvious. We remain positive on 2022E China cloud outlook. BUY GDS (GDSUS) and Innolight (300308CH).

Russia-Ukraine crisis could deepen data center chip shortage, resulting in lengthened server delivery schedule. Three Ukrainian companies produce >70% of global Neon gas supply. Neon is a gaseous chemical element being used during chip-making process. Key global semiconductor companies (ASML/Intel/Micron/SK Hynix) do not expect any direct impact as they have built up inventory. This is not the first time facing Neon shortage globally

(last one was in 2015-2016, triggered by Russian invasion into Ukraine's Crimean region in 2014) and that Neon price went up 10x during that period. If chip shortage deepens, we believe cloud expansion plan could experience delay as server deli

very cycle lengthens, affecting move-in schedule and hence utilization rate for IDC.

Huawei/China Telecom continue to gain share from AliCloud. AliCloud

CY4Q21 revenue merely grew at +20% YoY to RMB19.5bn due to 1) losing ByteDance overseas cloud order, 2) tightened regulations applied to online entertainment/education sectors and 3) losing SOEs/gov' hybrid cloud order to Huawei/China Telecom, in our view. According to IDC data, China IaaS+PaaS market size was at US\$5.70bn in 3Q21 (+48% YoY). AliCloud share loss (-3.5ppts YoY to 38.2%) to Huawei (+1.5ppts YoY to 10.7%) and China Telecom (+1.2ppts YoY to 9.0%) became more obvious.

Cloud providers operate hyperscale data centers in western regions before the "Eastern Data, Western Compute" plan was released. On 17 Feb, NDRC released "Eastern Data, Western Compute" plan that aims to solve the computing power/energy usage imbalance between data centers in the eastern and western regions. Alibaba/Tencent/Huawei already operate hyperscale data centers in Inner Mongolia, Zhangbei, Guizhou, before the documents were released. Network bandwidth and data trans

mission cost remain the bottlenecks for the location shift. In a longer term, land/power scarcity will provide grounds for data centers in tier-one cities to hike price.

Remain positive on cloud supply chain outlook. We expect 2022 E China cloud market to recover: China IaaS + PaaS + 30-40% YoY / cloud capex + 15-20% YoY. Among cloud supply chain, we like IDC: GDS (GDSUS, BUY) – benefits from cloud capex rebound and Optical transceiver: Innolight (300308CH, BUY) – benefits from 200G/400G optical modules deployment.

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=1_38250

