About NSR Survey

The following compiles survey results from NSR’s COVID-19 impact survey on the Satellite & Space Markets.

Survey was conducted between March 30th To April 1st, 2020.
Question 1

Has the Satellite & Space sector been impacted by COVID-19?

- Significant Impact: 50%
- Low Impact: 40%
- No Impact: 0%
- Positive Impact: 2%
- Other: 8%

Source: NSR
Has your company been impacted by COVID-19?

- Significant Impact: 44%
- Low Impact: 45%
- No Impact: 5%
- Positive Impact: 3%
- Other: 3%

*Source: NSR*
Question 3

Will COVID-19 impact your company in 2020 to 2021?

- **Significant Impact**: 48%
- **Low Impact**: 39%
- **No Impact**: 7%
- **Positive Impact**: 3%
- **Other**: 3%

*Source: NSR*
Questions 1 - 3

Observations

- Most views carried through all 3 questions (e.g. answering “Significant Impacts” on Question 1 usually resulted in “Significant Impacts” on Q2 & Q3.
- Almost 90% of total responses noted a negative impact (Low or Significant).
Question 4

How long will it take the Satellite & Space markets to recover from COVID-19 impacts?

Source: NSR
The need for information, connectivity and broadcast is critical now and will be even more critical after the end of this crisis. Existing satellite assets will be even more valuable to support the demand and the volume of contracted capacity will increase.

Subscriber growth gets back to normal. Ship installations become easier (as installers are allowed onboard), and airline transport recovers to previous levels. Everyone goes back to work!

1) Recovery of Stock Prices of Satellite Operators
2) Lift off of national emergency act in USA and Europe
3) Successful turnaround of OneWeb

Customer activity. Whether that’s direct correspondence or verticals showing recovery activities such airlines and cruise ships going back to a full schedule
End of force majeure declarations on contracts; availability of VC capital for new space projects

Number of satellites launched, Number of bankruptcy filings, Number of new registrations for space companies

Restart of launch preparation activities on the launch site

IFC revenue, especially from the airlines
Supply chain recovery, delivery milestones restored
Satellite capacity demand increase
Recovery of production capacities
Going back to normal life
Contracts back to “normal” resuming launches
Stimulus plans

Restoration of pre-COVID-19 technology trajectories, restoration of highly skilled workforce stability, recovery of space development and launch timelines, recovery to pre-COVID19 business productivity and operation efficiency, restoration of our supply chain.

Increase for a demand of data systems and indicators that USG space budgets won’t (or will) get cut to pay for economic stimulus bill(s)

as soon as people return to normal activity, the impact of COVID 19 will fade away quickly as all the markets will have a significant recovery activity

Resume of projects, satellite manufacturing and launchers return to FOC, stability of space insurance rates and available capacity
International travel
Recovery of airlines
Advertising market improvement
Oil price increase
More efficient daily work, quick response from supplier and manufacturer
Volume of orders related to capital equipment earth station infrastructure.
Increase of new satellite networks implementation
Private Investment Activity in new Space Programs
don’t resumes, lease capacity level resumes
Resurgence in sales and manufacturing.
Customer activations
Flow of investment capital.
Revenue Recovery
Revenues

Any new opportunities connected with new ground Satellite infrastructure will be delayed due to slow down and closure of manufacturing campaniles and also closure of boarders. This will be blocking point for Satellite operators to sell services.

The leading indicator will be when folks start to travel again. The more definitive indicator is when companies start investing, e.g., sign contracts to purchase space craft and launchers

Resume of satellite manufacturing programs that are being delayed.
Return to normal in transport industry
Return to investment plans by telcos
Vendor teams renewing work under current engagements. Capital markets (open) for borrowing. Renewed service discussions.
Anti-viral medicine that allows full work at offices, capital markets returning, Airline travel returning

Economic recovery, stabilization of financial and investor markets
COVID-19 curve flattening, travel restrictions lifting.

Revenues return to pre-COVID levels
Deployment of LEO, new MEO and new sales of GEO
Level of new contracts
Employment in the sector
Predictable supply chain.
GDP, government deficit
Satellite deliveries

Question 5
What are the indicators or benchmarks for a recovery? (Sample Replies)
Question 6

My Company is:

- Satellite Manufacturer: 11%
- Launch Provider: 4%
- Satellite Operator: 34%
- Earth Observation Provider: 4%
- SATCOM Service Provider: 18%
- Antenna Manufacturer: 7%
- Modem Manufacturer: 6%
- End-user of Satellite & Space Services: 2%
- Investor in Satellite & Space Markets: 1%
- Other: 12%

Source: NSR
Question 7 & 8

Rank your views on the impact of COVID 19 to the Satellite & Space Value-chain over the next 12 months:

- Satellite Manufacturers
- Satellite Launchers
- Earth Observation Providers
- SATCOM Service Providers
- Antenna Manufacturers
- Modem Manufacturers
- RF Component Manufacturers

Rank your views on how COVID 19 will impact each Satellite & Space End-user segment over the next 12 months:

- Government & Military
- Media & Broadcast
- Consumer Broadband
- Cellular Backhaul
- Energy
- Aero + Cruise Mobility
- Other Mobility

Source: NSR
Do you have other thoughts or comments about COVID-19’s potential impact on the Satellite & Space markets? (Sample Replies)

The current COVID-19 pandemic and associated economic impacts impose unanticipated and significant financial pressure and severe workforce instability, which threatens a wide variety of New Space business initiatives. This unprecedented threatened state of affairs introduces serious risks to a number of US interests, including: timely realization of critical, new and emergent capabilities you improve DOD missions; sustainment and continuity of New Space highly skilled, technical satellite workforce; sustainment of New Space as an increasingly critical component of the Defense Industrial Base; leakage of critical new and innovative networking and information assurance technologies to foreign investors; and other clear and present dangers of an enduring economic and national security nature.

Any party that is raising money will have to have a really good business plan to overcome the investor question, "why is your project going to be more successful than OneWeb?"

Some other effects of COVID-19 and the economic shutdown: parties are exercising “force majeure” clauses to get out of contracts; operators are re-evaluating the economics of new programs and thus delaying procurement or putting new programs "on hold". Also, given the recent appreciation of the USD, contracts denominated in dollars are now looking 5-10-15% more expensive than just a few weeks ago.

COVID-19 has highlighted, more than any other event or policy, the absolute dependence of people, businesses and governments on connectivity. It has also shed a spotlight on the billions of unconnected people worldwide. The impact of COVID-19 on that front will probably continue for years to come. This should be a great opportunity for the satellite industry to thrust itself in this narrative and proof that it can fill that gap with ease and can further the reach of existing terrestrial networks for the benefit and wellbeing of humanity. If not now, then never.

Satellite & Space Providers that Rely on the Commercial Space Market will be hardest hit. Those firms with core National Security backlogs will be more sheltered from impacts. I envision many commercial space firms that have been narrowly walking the edge of financial sustainability & relying on private investment will exit during this downturn (like OneWeb). To quote Warren Buffett: "When the economic tide goes out, we will see who has been swimming naked".

Further consolidation in the equipment and services sector, due to distresses sales, low valuations, and synergistic acquisitions.

Strain in system and unit vendors; price competition and supplier selection based on perceived long term viability

Pressure on SES and mPower (also following OW bankruptcy) - business case versus capex requirements to complete
Do you have other thoughts or comments about COVID-19's potential impact on the Satellite & Space markets? (Sample Replies)

There will be significant impact to satellite manufacturing due to collapse of supply chain. Satellite components depend upon electric devices that are only available in US and Europe both of which are heavily impacted by COVID-19. We do not see much at this moment but I am sure we will see massive impact later on. All of this depends on how long the virus lasts. If it is only a few more months the impact will still be profound on revenues for this year but it lasts into the fall and even beyond then it will have a profound and devastating impact on our and most other industries and life as we know it on earth.

The covid-19 crisis shall accelerate the transformation process of the space industry towards more integrated and coherent solutions for connectivity/PNT/EO-Intelligence for governments.

It will provoke a wave of consolidation as well

Increased need. Intelsat Chapter 11 would help industry to stop them allegedly artificially capacity dumping. One Web was a SoftBank issue form We Works and a piss poor business plan masquerading as COVID 19.

Weak business models can no longer find funding. I believe we’ll see consolidation in the equipment market and increased in-house service models as intermediary service providers like speedcast go away.

Many countries are closing borders, so shipment of the equipment to end users and travel for installers are now very limited. No threats to current networks, but many obstacles for future ones.

For e.g. Media & Broadcast, you have the big negative important that there will be no sports events, still, their our remote OU services now. There is sometimes no black and white.

Mobility market is being impacted significantly right now and might take some time to recover. HTS buildout is being delayed (ex: Hughes Jupiter 3 as well as ViaSat 3).

It really is a mixed impact. Some verticals have slowed down versus others that have picked up. The satellite industry is of long term nature so somewhat less sensitive

Marshall plans deployed by some countries could potentially propel the society into the future through hyper connectivity and smart cities

The first 12 months will be terribly negative. After 12 months should start improving and it will be positive on the long term.

Lack of investments; Less orders for equipment; Difficulties to deploy equipment; Difficulties to sell services in general it will be interesting to see how financing of entrepreneurial space projects moves forward.

More focus on country ability to stand alone with supply and operation of key elements

All boils down to how quickly people can return to work

Impact depends on how long the COVID-19 will exist.

It may still be too early to tell. Ask again in a month!
Thank You